

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Biochemistry	Alk.ph	Photometric	S,PH	0.5	Daily	next day	7days at 2-8°C, 2months at -20°C	at 2-8°C, at -20°C	Clotting sample, Hemolysis	Avoid repeated freeze / thaw cycles
Immunology	Anti Neutralizing	Elisa	S	1	Tue	next day	2days at 2-8°C, >2Days: -20 °C Avoid Freeze thaw	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Immunology	Anti Diphtheria Ab	Elisa	S	0.5	30day	30day	7days at 2-8°C, for longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Immunology	Anti tetanus Ab	Elisa	S	0.5	30day	30day	7 days at 2-8 °C 3 month at -20 °C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Be separated quickly. Avoid freeze/ thaw cycle
Immunology	Anti Thyroid Microsomal Ab	CLIA	S,PH,PE,PC	0.5	10day	10day	4days at 2-8°C, 3months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemi	Be separated until 20-30 min. Avoid freeze / thaw cycle
Hormone	Acetaminophen	HPLC	S	1	9day	9day	7 days at 2-8°C, 2 months at -20°C	at 2-8°C at -20°C	---	---
Biochemistry	Acid Phosphatase Prostat	Colorimetry	S (Add 30 µl acetic acid 1.5 mol/L to 1 ml of and mix)	0.5	Daily	2day	Immediately (up to 1hour)	up to 0.5 hrs.RT	Hemolysis, Icteric, Lipemic	Fasting is recommended
Biochemistry	Acid Phosphatase (Total)	Colorimetry	S (Added 30 UI acetic acid 1.5 mol/L to 1 ml of Serum and mix)	0.5	10day	10day	Immediately (up to 1hour)	up to 0.5 hrs.RT	Hemolysis, Icteric, Lipemic	Fasting is recommended

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Biochemistry	Amylase	Enzymatic, Colorimetry	S	0.5	1 day	1 day	1 week at 25 °c 6 month at 4 °c	at 2-8°c, at -20°c	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles Fasting is recommended
Biochemistry	AldolaseSerum	Enzymatic	S	0.5	7day	7day	Rapidly at -20°	at -20°c	Hemolysis mild & gross, Icteric gross, lipemic gross	Serum or plasma must be seperated as soon as possible.
Hormone	Aldosterone	Elisa	S,U	0.5	9day	9day	Rapidly at -20°c	at -20°c	Hemolysis, Icteric, Lipemic	Avoid using medication (Anti Blood pressure, Diuretic, ...) 2 weeks prior to samplin Transport on ice. Avoid repeated freeze/thaw vcycles وضعیت نشسته و خوابیده بیمار گزارش شود
Biochemistry	Anti Streptolysin O titre	Imm.Turb	S	0.5	Even days	next day	2days at 2-8°c, 6months at -20°c	at 2-8°c at -20°c	---	---
Immunology	Anti TPO Ab	ECL,CLIA	S, PE, BF	0.5	odd day	next day	3 days at 2-8°c, 1months at -20°c	at 2-8°c at -20°c	Hemolysis, Icteric, Lipemic	Be separated until 20-30 min. Avoid freeze / thaw cycle
Hormone	Anti ADH Ab	RIA	S	5	30day	30day	1 month at -20°c CRITICAL FROZEN	at -20°c	Gross Hemolysis	---
Immunology	Anti DNA (double-stranded)	Elisa	S	0.5	Sun	next day	7days at 2-8°c, 3months at -20°c	at 2-8°c, at -20°c	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Immunology	C-ANCA	Elisa	S	0.5	13day	13day	2 days at 2-8 °c for longer time at -20 °c	at 2-8°c, at -20°c	Hemolysis, Gross: Icteric, Lipemic	---

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Immunology	Anti Mitochondrial Ab (AMA)	CLIA	S	0.5	10day	10day	1 day at 2-8°C, for longer time at -20°C	at 2-8°C, at -20°C	---	---
Immunology	Anti Nuclear Antibody	Elisa	S	0.5	6day	6day	2days at 2-8°C, > at -20°C	at 2-8°C, at -20°C	Lipemic	---
Immunology	Anti Toxoplasma Ab. (IgM)	Elisa	S	0.5	Tue	next day	2days at 2-8°C, > at -20°C	at 2-8°C, at -20°C	---	---
Immunology	Anti Toxoplasma Ab. (IFA)	Elisa	S	0.5	Tue	next day	2days at 2-8°C, > at -20°C	at 2-8°C, at -20°C	---	---
Immunology	Anti Thyroglobulin Ab	Elisa	S, PE	0.5	7day	7day	1days at 2-8°C, for longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Immunology	Anti Rubella Ab (IgG)	ECL	S,PE	0.5	Even days	1 day	1 week at 2-8°C for longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Immunology	Anti Rubella Ab (IgM)	Elisa	S	0.5	Thu,Sat	next day	2days at 2-8°C, > at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Immunology	Anti Chlamydia Ab (IgG)	Elisa	S	0.5	8day	8day	5 days at 2-8°C for longer time at -20°C	at 2-8°C, at -20°C	---	---
Immunology	Anti Chlamydia Ab (IgM)	Elisa	S	0.5	Mon,Thu	7day	5 days at 2-8°C for longer time at -20°C	at 2-8°C, at -20°C	---	---
Immunology	Anti C1q	SRID	S	0.5	8day	8day	7 days at 2-8°C, 3 months at -20°C	up to 0.5 hrs at Rt, at -70°C	---	---

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Immunology	Anti Chlamydia Ab (IgA)	Elisa	S	1	8day	8day	1 day at RT, 7 days at 2-8°C 3 months at -20°C	at 2-8°C, at -20°C	---	---
Immunology	Anti mumps Ab (IgG)	Elisa	S,CSF	0.5	10day	10day	Analyse up to 48 hours,for longer time at -70°C	at RT	Hemolysis	Avoid repeated freeze / thaw cycles
Immunology	Anti mumps Ab (IgM)	Elisa	S,CSF	0.5	10day	10day	Analyse up to 48 hours,for longer time at -70°C	at RT	Hemolysis	Avoid repeated freeze / thaw cycles
Immunology	Anti MOG	IFA	S	0.5	10day	10day	5 days at 2-8°C, 1 month at -20°C	at 2-8°C, at -20°C	Gross: Hemolysis, Lipemic	---
Metabolic disorders	Amino Acid	HPLC TLC	U PE	U:10 PE:1	17day 7day	17day 7day	U: 1 day at 2-8°C, PE: 2 weeks at -20°	U: at 2-8°C, PE: at -20°C	Hemolysis	Fasting is recommended. Urine must be fresh. Avoid freeze/ thaw cycles Be separated quickl
Immunology	Anti HTLV-(1+2) Ab	Elisa	S ,PE	0.5	8day	8day	5 days at 2-8°C for longer time at -20°C	at 2-8°C, at -20°C	---	---
Immunology	Anti H.I.V (Type 1&2 and P24 Ag)	Elisa	S ,PE	0.5	odd day	next day	Less than 5 days at 2-8°C for longer time at -20°C	at 2-8°C, at -20°C	---	---
Immunology	Anti Sperm Ab	IF	S	0.5	Sun	2day	5 days at 2-8°C, for longer time at -20°C	at 2-8°C, at -20°C	---	---
Immunology	Anti Fasciola Ab (IgG)	Elisa	S	0.5	7day	7day	1 day at 2-8°C, for longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles

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Immunology	Alpha 1 Anti Trypsin	Enzymatic	S, PE	0.5	Sun ,Wed	2day	1 week at 2-8°C, for longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Immunology	Anti phospholipid Ab (IgG),(IgM)	Elisa	S	0.5	10day	10day	3 days at 2-8°C, for longer time at -20°C	up to 0.5 hrs Rt	Hemolysis, Icteric, Lipemic	Serum or plasma must be seperated as soon as possible
Hormone	Anti Platelet Ab	IFA	S	0.5	Sun	2day	1 week at 2-8°C for longer time at -20°C	at 2-8°C, at -20°C	---	---
Specific Biochemistry	A.C.E	Kineti	S,BF	0.5	7day	7day	Immediately at -20 °C (up to Analyse)	at -20°C	Hemolysis, Icteric, Lipemic	Serum or plasma must be seperated as soon as possible Avoid using medicatio
Immunology	Anti Cardiolipin Ab (IgG) (IgM)	Elisa	S	0.5	7day	7day	5 days at 2-8°C, longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Lipemic	Avoid repeated freeze / thaw cycles
Immunology	Anti Brucella Ab (IgG)	Elisa	PE,S	0.5	6day	6day	2 days at 2-8°C, for longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles protect the light
Immunology	Anti Brucella Ab (IgM)	Elisa	PE,S	0.5	6day	6day	2 days at 2-8°C, for longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles protect the light
Hormone	Anti Desmoglein-1	Elisa	S	0.5	8day	8day	5 days at 2-8°C, 14 days at -20°C	at 2-8°C, at -20°C	Hemolysis, Lipemic	---
Hormone	Anti Desmoglein-3	Elisa	S	0.5	8day	8day	5 days at 2-8°C, 14 days at -20°C	at 2-8°C, at -20°C	Hemolysis, Lipemic	---

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Immunology	Anti C.C.P	Elisa	PE,PC, S, PH	0.5	Wed	next day	14 days at 2-8°C	at 2-8°C	---	---
Hormone	Anti GAD	Elisa	S	0.5	17day	17day	5 days at 2-8°C, longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Immunology	Anti GBM Ab	IFA	S	0.5	10day	10day	1 week at 2-8°C, for longer time at -20°C	at 2-8°C, at -20°C	---	---
Immunology	Anti Endomysial Ab (IgG)	IF	PE ,S	0.5	9day	9day	5 days at 2-8°C, for longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Fasting is recommended
Immunology	Anti Endomysial Ab (IgA)	IF	PE,S	0.5	9day	9day	5 days at 2-8°C, for longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Fasting is recommended
Immunology	Anti Gliadin Ab (IgG)	Elisa	S	0.5	9day	9day	5 days at 2-8°C, longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Fasting is recommended
Immunology	Anti Gliadin Ab(IgA)	Elisa	S	0.5	9day	9day	5 days at 2-8°C, longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Fasting is recommended
Biochemistry	Anti Insulin Ab	Elisa	S	0.5	12day	12day	7 days at 2-8°C, 3 months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Immunology	Anti RNP	Elisa	S	0.5	13day	13day	Should be stored at 2-8°C for up to 14day	at 2-8°C	Hemolysis, Icteric, Lipemic	---
Immunology	Anti RF IgG	Imm.Turb	S, PE, PH	0.5	9day	9day	7 days at 2-8°C, 3months at -20°C	at 2-8°C, at -20°C	Hemolysis	---

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Hormone	A.C.T.H	ECL	PE	0.5	Thu	1day	6 hrs at 2-8 °c for longer time at -20 °	2 hrs. 2-8 °c, -20 °c	Hemolysis	Fasting ,Avoid stres Rapidly seperated (at 2-8 °c), Refrigerated centrifuge must be used Fasting ,Avoid stres
Immunology	Anti MUSK Ab	Elisa	S	0.5	9day	9day	7 days at 2-8 °c, 1 month at -20 °c	at 2-8 °c, at -20 °c	Gross Hemolysis	---
Immunology	Anti Measles Ab (IgG)	Elisa	S,CSF,BF	0.5	Thu	2day	4 days at 4 °c for longer time at -20 °c	at 4 °c, at -20 °c	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Immunology	Anti Measles Ab (IgM)	Elisa	S,CSF,BF	0.5	Thu	2day	4 days at 4 °c for longer time at -20 °c	at 4 °c, at -20 °c	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Immunology	Anti Centromer Ab	Elisa	S	0.5	8day	8day	5 days at 2-8 °c for longer time at -20 °c	at 2-8 °c, at -20 °c	Hemolysis, Icteric, Lipemic	---
Immunology	Anti Smith Ab (anti sm)	Elisa	S	0.5	10day	10day	5 days at 2-8 °c for longer time at -20 °c	at 2-8 °c, at -20 °c	Hemolysis, Icteric, Lipemic	---
Immunology	Anti Smooth muscle Ab(ASMA)	IFA	S	0.5	10day	10day	5 days at 2-8 °c for longer time at -20 °c	at 2-8 °c, at -20 °c	---	---
Tumor Markers	ALpha Feto Protein	CLIA	S,PC, PE,Heparin	0.5	Mon,Sat, Thu	next day	3 days at 2-8 °c or longer time at -20 °c	at 2-8 °c, at -20 °c	Clotting sample, Hemolysis, Lipemic	---
Hormone	Androstendione	Elisa	S	0.5	Mon,Thu	2day	Rapidly at -20 °c	at -20 °c	Hemolysis, Icteric, Lipemic	Fasting is recommended

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Immunology	Anti SS-A (Ro) Ab Anti SS-B (La) Ab	Elisa	S	0.5	10day	10day	5 days at 2-8°C, for longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Immunology	Anti TTG Ab(IgG)	Elisa	S	0.5	8day	8day	7 days at 2-8°C, 3months at -20°C	at 2-8°C, at -20°C	Hemolysis, Lipemic	Avoid repeated freeze / thaw cycles
Immunology	Anti TTG Ab (IgA)	Elisa	S	0.5	Mon,Sat	next day	7 days at 2-8°C, 3months at -20°C	at 2-8°C, at -20°C	Hemolysis, Lipemic	Avoid repeated freeze / thaw cycles
Immunology	Anti SCL-70 Ab Topoisomerase	Elisa	S	0.5	16day	16day	1week at 2-8°C, for longer time at -20°C	at 2-8°C	---	---
Immunology	Anti Mullerian hormone	Elisa	S, PE, PH	0.5	7day	7day	7 days at 2-8°C, 3months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Immunology	Aspergillus (IgG)(IgM)	Elisa	S	0.5	15day	15day	5 days at 2-8°C, 2 month at -20°C	at 2-8°C, at -20°C	Gross Hemolysis	---
Body Fluid Examination	Ascites ADA	Enzymatic	S,PE,CSF	0.5	6day	6day	5 days at 2-8°C 1 month at -20°	at 2-8°C, at -20°C	Hemolysis	---
Microbiology	Ascite culture	Aerobic & Ana	Ascitic fluid	10	8day	8day	in the fastest time possible	24 hrs at 4°C	---	---
Hormone	Adrenalin	Urine:HPLC S:Elisa	PH,PE,S,U	1,10	21day	21day	pelasma: 1month at -20°C u:7day at2-8°C 1month at-20°C plasma freeze	plasma:-20°C, urine: 2-8°C, -20°C	Gross Hemolysis	---

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Microbiology	Abscess Direct Smear	---	Secretions	---	2day	2day	24 hrs at RT	24 hrs at RT	---	---
Microbiology	Abscess Culture	---	Secretions	---	8day	8day	24 hrs at RT	24 hrs at RT	---	---
Hormone	AFP	ECL,CLIA	S ,PE, PH,PC	0.5	Mon,Sat, Thu	next day	7 days at 2-8°C, 3months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Body Fluid Examination	A.D.A	Enzymatic	S,PE,CSF,BF	0.5	Daily	2day	5 days at 2-8 °C 1 month at -20 °C	at 2-8°C, at -20°C	Hemolysis	---
Hormone	Anti SLA	Elisa	S	0.5	10day	10day	5days at 2-8°C, 2months at -20°C	at 2-8°C, at -20°C	Gross Hemolysis	---
Biochemistry	Apolipoprotein A1	Imm.Turb	S	0.5	10day	10day	7 days at 2-8°C, 1month at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Biochemistry	Apolipoprotein B	Imm.Turb	S	0.5	10day	10day	7 days at 2-8°C, 1month at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Immunology	Anti MPO	Elisa	S	0.5	6day	6day	14 days at 2-8 °C	at 2-8°C	---	---
Immunology	Anti MCV	Elisa	S	1	12day	12day	4 hrs at RT 24hrs at 2-8°C	at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Immunology	Anti Beta 2 Glycoprotein(IgG)	Elisa	S	0.5	9day	9day	1 day at 2-8 °C for longer time at -20 °C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles

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Hormone	Anti Beta 2 Glycoprotein(IgA)	Elisa	S,PE	0.5	7day	7day	1 day at 2-8°C for longer time at -20°	at 2-8°C, at -20°C	Avoid repeated freeze/thaw cycles	---
Immunology	Anti Beta 2 Glycoprotein(IgM)	Elisa	S	0.5	9day	9day	1 day at 2-8°C, longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Coagulation tests	APCR (Leiden Factor)	Imm.Turb	PC	2	13day	13day	8 hrs at 0°C , or longer time at -20°	up to 1 hrs. at 0°C, at -20°C	Hemolysis	Serum or plasma must be seperated as soon as possible. Two times centrifugation is recommended. Avoid repeated freeze/thaw cycl
Coagulation tests	Anti Thrombin III	Imm.Turb	PC	2	6day	6day	8 hrs at 0°C , or longer time at -20°	up to 1 hrs. 0°C,-20°C	Hemolysis	Serum or plasma must be seperated as soon as possible. Two times centrifugation is recommended. Avoid repeated freeze/thaw cycle
Hormone	Ammonia	Enzymatic	PE	0.5	4day	4day	20 min at 4°C, 1 day at -20°C, for longer time at -70°C	at -20°C	Hemolysis, Icteric, Lipemic	Refrigerated Centrifuge
Immunology	Anti Jo-1 Ab	Elisa	S	0.5	13day	13day	should be stored at 2-8°C for up to 14 day	at 2-8°C	---	---
Serology	Amoebiasis Ab	Elisa	S	0.5	7day	7day	2 days at 2-8°C	at 2-8°C	---	---
Biochemistry	AlbuminSerum	Photometric	S, PE, PH	0.5	Daily	next day	7 days at 15-25°C, 1month at 2-8°C 3months at -20°C	at 2-8°C, at -20°C	Hemolysis	---

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Immunology	Anti Borrelia Ab (IgG)	CLIA	S,PE,PC,C	0.5	Sat,Tue	2day	1 week at 2-8°C for longer time at -20°	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Immunology	Anti Borrelia Ab(IgM)	CLIA	S,PE,PC,C	0.5	Sat,Tue	2day	1 week at 2-8°C for longer time at -20°	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Immunology	Anti -PR3	Elisa	S	0.5	7day	7day	should be stored at 2-8°C for up to 14 day	at 2-8°C,	Hemolysis, Icteric, Lipemic	---
Hormone	Adiponectin	Elisa	S	1	21day	21day	5 days at 2-8°C, 1month at -20°C	at 2-8°C, at -20°C	Hemolysis	---
Microbiology	Blood Culture & sensitivity	Aerobic	WB	10% کمتر از حجم کشت نرمال	21day	21day	the same time transported at 37°C	at RT< 1hrs	---	---
Biochemistry	BS	Photometric	S, PH ,PE	0.5	Daily	next day	1 day at 20-25°C 7day at 4-8°C	at 2-8°C, at -20°C	Hemolysis, Icteric	---
Biochemistry	Bilirubin	Photometric	S,PH	0.5	Daily	next day	1 day at RT. 7Days at 2-8°C, 3months at -20°C at dark place	at 2-8°C, at -20°C	exposure to light ,Hemolysis	Avoid repeated freeze / thaw cycles
Hormone	Beta titre	ECL,CLIA	S, PH ,PE	0.5	Daily	next day	3 days at 2-8°C, 12months at -20°C	at 2-8°C, at -20°C	---	---
Urine Analysis	Bence Jones Protein	---	U	5	2day	2day	---	---	Less than 5cc	---
Microbiology	Breast Direct Smear	---	Breast dis	---	2day	2day	the fastest time after receiving the sample	at RT	---	---

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Microbiology	Breast Culture	Aerobic & Ana	Breast dis	5	8day	8day	the fastest time after receiving the sample	at RT	---	---
Microbiology	Body Fluid direct Smear	---	Body Fluid	---	2day	2day	at RT	at RT	---	---
Biochemistry	BUN	Turbidimetric	S	0.5	Daily	next day	3 months at -20°C 15 days at 20-25°C, 3months at 4-8°C,	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Specific Biochemistry	Blood Copper	Photometric	S ,PE ,PH ,U(R&24)	0.5,10	s: 4day u:7day	s: 4day u:7day	7 days at 2-8°C, 3months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Genetics	Blood Karyotype	Gbanding	WB(H)	5	13day	13day	at 2-8°C, fast sending	at 2-8°C, fast sending	---	عدم مصرف دارو یک هفته قبل از انجام آزمایش
Specific Biochemistry	Blood Ceruloplasmin	Imm.Turb	S ,PE	0.5	8day	8day	7 days at 2-8°C, or longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Molecular diagnosis	Urine B2-Microglobulin Random	CLIA	U	16cc	5day	5day	at 2-8°C, at -20°C	at 2-8°C, at -20°C	---	---
Biochemistry	B2-Microglobulin	Elisa	S ,PE	0.5	6day	6day	1 week at 2-8°C for longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze/thaw cycle
Parasitology	Bone marrow Biopsy	Sectioning and Staining	Tissue	---	Daily	10day	Unlimited after fixatio	---	اتولیز بودن	The volume of the fixable should be least at 5 times tissue volum

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Parasitology	Bone marrow Aspiration	Direct smear	Smear	Several Slid	Daily	10day	at RT	at RT	اتولیز بودن	---
parasitology	Borrelia	بررسی لام خون محیطی و لان نوک انگشت	WB,S	3	2day	2day	7 days at 2-8°C, 3months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Blood bank	Blood Group	cell type	WB,S	3	Daily	next day	7 days at 2-8°C, 1day at RT	at 2-8°C, at RT	Hemolysis, Frozen, Clotting, Rouleaux formation	---
Coagulation tests	Bleeding Time	Duce	---	---	Daily	next day	---	---	---	---
Hormone	Beta HCG-Serum	CLIA,ECL	S ,PE ,PC	0.5	Daily	next day	3 days at 2-8°C, 12months at -20°C	at 2-8°C, at -20°C	---	---
Metabolic disorders	Blood Amino Acid (HPLC) chromatography	HPLC	PE	U: 3 Others: 1	10day	10day	1 day at 2-8°C, 1 month at -20°C	at 2-8°C, at -20°C	Hemolysis	Plasma sample be separated quickly
Microbiology	Bal Culture & Sensitiv	---	Secretions	---	8day	8day	24 hrs at 4°C	24 hrs at RT	---	---
Immunology	Covid Anti spike-G	Elisa	S	1	6day	6day	2 days at 2-8°C, >2Days: -20 °C Avoid Freeze-thaw	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Immunology	Covid Anti RBD-Total	Elisa	S	1	6day	6day	2 days at 2-8°C, >2Days: -20 °C Avoid Freeze thaw	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample tyPE	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Microbiology	Catheter Culture	---	U	20	4day	4day	24 hrs at 4°C	2 hrs at 4°C	---	---
Immunology	Cold Agglutinine	Agglutination	S	0.5	10day	10day	1 day at 2-8°C	at 2-8°C	---	---
Biochemistry	Calcium	Colorimetry	S,U 24,U	0.5	Daily	1day	7 days at 20-25 °C, 3 week 4-8 °C, 8 month at -20 °C	at 20-25 °, at 4-8 °C, at -20 °C,	Hemolysis, Icteric, Lipemic	Avoid repeated freeze/thaw cycles Fasting is recommended
Biochemistry	CPK	photometric	S ,PE	0.5	Daily	next day	1 day at RT 7 days at 2-8°C, 1 month at -20°C	at 2-8°C, at -20°C	Hemolysis, Lipemic	Avoid repeated freeze / thaw cycles
Electrolytes	Chloride	ISE	S,U 24,U,PH	0.5	5day	5day	7 days at 2-8 °C	at 2-8°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Hormone	Choromogranin A	Elisa	S	1	10day	10day	3 months at -20°C CRITICAL FROZEN	at -20°C	Gross Hemolysis	---
Biochemistry	Cholinesterase	Photometric	S	0.5	10day	10day	serom: 7 days at 2-8°C, 3months at -20°C	at 2-8°C, at -20°C	Hemolysis, Lipemic	---
Serology	Coombs Wright	Agglutination	S,CSF,BF	1	3day	3day	2 days at 2-8°C, 7 days at -20°C	at 2-8°C, at -20°C	Hemolysis	---
Immunology	C1 Inhibitor	Imm.Turb	S	0.5	10day	10day	Immediately for longer time at -70°C	up to 0.5 hrs at RT -70°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S .vol (ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Immunology	C3	Imm.Turb	S, PE ,PH	0.5	Thu,Sat	next day	7 days at 2-8°C, 1 months at -20°C (Definitely in the freezer)	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Immunology	C4	Imm.Turb	S, PE ,PH	0.5	Thu,Sat	next day	7 days at 2-8°C, 1 months at -20°C (Definitely in the freezer)	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Pathology	Consultation Slide	Direct smear	Stain Slide	---	7day	7day	at RT	at RT	---	---
Serology	CH50	Elisa	S	0.5	5day	5day	Rapidly at -20°C	at -20°C	Hemolysis	Avoid repeated freeze / thaw cycles
Immunology	Cytomegalovirus (CMV) IgG	ELFA	S	0.5	Tue	next day	7 days at 2-8°C, 3 months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Immunology	Cytomegalovirus (CMV) IgM	ELFA	S	0.5	Tue	next day	7 days at 2-8°C, 3 months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Hematology	CBC	اتوماتیک دستگاہی	WB	3	Daily	next day	4 hrs at RT, 1 days at 2-8°C	at RT, at 2-8°C	Hemolysis, Frozen, Clotting, Incorrect anticoagulant	---
Hematology	CD11abc	Flow cytometry	€WB	2	7day	7day	1 day at 2-8°C	at 2-8°C	Hemolysis, Frozen, Clotting, Incorrect anticoagulant	---
Immunology	CD3-CD4-CD8-CD16- CD19-CD56-CD25-CD7- CD20-CD18-CD2-CD21- CD27-CD10-CD23-CD5- CD14	Flow cytometry	WB(EDTA)	2	10day	10day	1 day at 2-8°C	at 2-8°C	Hemolysis, clotting, frozen, incorrect, anticoagulant	---

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S .vol (ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Biochemistry	CRP	Turbidimetric	S	0.5	Daily	next day	3 months at -20°C 15 days at 20-25°C, 3months at 4-8°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Immunology	CIC	Imm.Turb	S	0.5	7day	7day	2 days at 2-8°C, 1months at -20°C	at 2-8°C, at -20°C	---	---
Microbiology	C.S.F Culture for B.K	Aerobic & Ana	CSF	1	60day	60day	the same time must be tested	at RT	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Hormone	Clonazepam	HPLC	S	2	odd day	2day	2 days at 2-8°C for longer time at -20°	at 2-8°C at -20°	---	---
Immunology	Clostridium Toxin A & B	Elisa	Stool	1gr	8day	8day	---	---	---	---
Coagulation tests	Clotting Time	Tube method	U,PE	0.5	Daily	next day	7 days at 2-8°C, 3months at -20°C	at 2-8°C, at -20°C	Clot	---
Tumor Markers	C.E.A	CLIA,ECL	S,PE	0.5	Tue	next day	5 days at 2-8°C, 3months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Hormone	Cell Free DNA(N.I.P.T)	NGS	WB	10	30day	30day	2 days at 2-8°C	at 2-8°C	Hemolysis	---
Hormone	Cortisol	ECL	S U 24	0.5	Thu 8day	1day 8day	7 days at 4-25°C	at 4-25°C	Hemolysis, Icteric, Lipemic	Sampling time between 6-8 am. Avoid stress ,using medication

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S .vol l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Hormone	CMV Ab(IgM)-capture	CLIA	S, PE, PH, PC, BF,CSF	0.5	1day	1day	7 days at 2-8°C , 3 months at -20°C	at 2-8°C at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Immunology	CMV Ab (IgG)-avidity	Elisa	S	0.5	10day	10day	7 days at 2-8°C, 3 months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Immunology	CMV antigenemia (pp-65)	IFA	WB(EDTA)	3	13day	13day	6 hrs at RT	4 hrs. RT	Hemolysis, Frozen, Clotting, Incorrect anticoagulant	---
Pathology	Consult Block pathology	Sectioning and Staining	Paraffin Block	---	Daily	5day	Unlimited after fixation.	---	اتولیز بودن	---
Hormone	C-Peptide	ECL	S	0.5	10day	10day	Immediately at -20 ° (up to Analyse)	at -20°C	Hemolysis, Icteric, Lipemic	Fasting is recommended Rapidly seperated (at 2-8°C)
Therapeutic drug monitoring	Carbamazepine	Fluorescence polarization	S	0.5	Daily	2day	2 days at 2-8°C, for longer time at -20°C	at 2-8°C, at -20°C	---	---
Microbiology	CSF Direct Smear	---	CSF	---	2day	2day	at RT fast sending	at RT fast sending	---	---
Body Fluid Examination	CSF LDH	photometric	CSF	0.5	Daily	next day	6 week at -20°C	at 2-8°C	Hemolysis, Icteric, Lipemic	---
Body Fluid Examination	CSF ADA	Enzymatic	CSF ,PE,S,BF	0.5	7day	7day	5 days at 2-8°C, 1 month at -20°C	at 2-8°C, at -20°C	Hemolysis	---

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S .vol l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Body Fluid Examination	CSF Gram Stain	---	CSF	---	3day	3day	at RT fast sending	at RT fast sending	---	---
Biochemistry	Creatinine	Colorimetry	S	0.5	Daily	next day	7 days at RT. 4-25°C 3months < -20°C at RT	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Tumor Markers	CA 125	CLIA,ECL	S	0.5	Tue	next day	5 days at 2-8°C, 3 months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Biochemistry	CPK-MB	DGKC	S,PH	0.5	Daily	next day	7 days at 2-8°C, (dark place)	at 2-8°C, at -20°C	Hemolysis	Avoid repeated freeze / thaw cycles
Tumor Markers	CA 15-3	ECL	S	0.5	Tue	next day	7 days at 2-8°C 3 months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Tumor Markers	CA 135	CLIA	S	0.5	5day	5day	7 days at 2-8°C 3 months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Therapeutic drug monitoring	(Cyclospine)Sandimmun	ECL	WB(EDTA)	1	9day	9day	at 2-8 °C	at 2-8 °C	Hemolysis, Icteric, Lipemic	---
Tumor Markers	CA 19-9	ECL,ECL	S, PE	0.5	Tue	next day	7 days at 2-8°C 3 months at -20°C	---	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Tumor Markers	CA 242	Elisa	S,PE,B	0.5	Sat	2day	1 day at 2-8 °C, for longer time at -20 °C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Tumor Markers	CA 72-4	ECL	S,PE	0.5	Tue	11day	1 day at 2-8 °C, for longer time at -20 °C	at 2-8°C, at -20°C	Hemolysis, (Mild, Gross)	---

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Biochemistry	Ca (Ionized)	ISE	S	0.5	Daily	1day	7 day at 20-25°C, 3week 4-8°C , 8month at -20°C	at 20-25°C , at 4-8°C , at -20°C	---	Avoid repeated freeze / thaw cycles
Immunology	Cystatin C	Colorimetry	S, PE	0.5	9day	9day	2 days at 2-8°C, for longer time at -20°C	at -20°C	---	Avoid repeated freeze / thaw cycles
Hormone	Calcitonin	CLIA	S	0.5	10day	10day	4 days at 2-8°C Ur.:1month at -20°C	at 2-8°C, at -20°C	---	Serum or plasma must be seperated as soon as possible. Rapidly seperated (at 2-8°) Fasting
Immunology	Calprotectine	Imm.Chrom	Stool	0.5	7day	7day	7 days at 2-8°C	at 2-8°C at -20°C	---	---
Immunology	Cryoglobulin	Percipitation	S	1	9day	9day	2 days at RT	at RT	Hemolyse, Ictreic, Lipemic. Whole blood drawn in a prewarmed (37 C) syringe. Frozen, Storage at 2-8 C	Fasting is recommended ارسال در دمای محیط
Hormone	CYFRA 21	ECL	S,PE,PH	1	9day	9day	4 weeks at 2-8°C, 6months at -20°C	at 2-8°C, at -20°C	---	---
Serology	CRP High Sensitive	Imm.Turb	S,PH,BF	0.5	10ay	10day	1 week at 2-8°C for longer time at -20°	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Immunology	Diazepam	Imm.Chrom	U	5	Daily	1day	4 days at 2-8°C Ur.: 1month at -20°C	at 2-8°C, at -20°C	---	---

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Hormone	DHEA-SO4	CLIA	S, PH	0.5	Sat,Tue	next day	7 days at 2-8°C, 2months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Serology	Direct Coombs test	Agglutination	WB	2	Daily	next day	1 week at 2-8°C	at 2-8°C	---	---
Coagulation tests	D-dimer (Quantitative)	Coagulation	PC	3	Daily	Same day	8 hrs at RT 1months at -20°C	at 2-8°C, at -20°C	Hemolysis, Lipemic	Avoid repeated freeze / thaw cycles
Therapeutic drug monitoring	Digoxin	CLIA	S	0.5	8day	8day	2 days at 2-8°C ,for longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freez/ thaw cycles
Immunology	EBV Ab (VCA)IgG	ELISA	S	0.5	8day	8day	1 week at 2-8°C, for longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Immunology	EBV Ab (VCA)IgM	ELFA	S	0.5	8day	8day	1 week at 2-8°C, for longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Hematology	E.S.R	Westergren	PC	2	Daily	next day	12 hrs at 2-8°C, 2hr at RT	at 2-8°C,at RT	Clot ,Hemolys	---
Hormone	Strangilidous ab	Elisa	S	0.5	9day	9day	5 days at 2-8°C, 2months at -20°C	at 2-8°C, at -20°C	Hemolysis	---
Hormone	Estradiol	CLIA	S,P	0.5	Sat	next day	5 days at 2-8°C, 3months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Microbiology	Ear Direct Smear	---	Ear Swabs	---	2day	2day	24 hrs at RT	24 hrs at RT	---	---

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S .vol l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Microbiology	Ear Discharge (C&S)	---	Ear Swabs	---	4day	4day	24 hrs at RT	24 hrs at RT	---	---
Microbiology	Eye dis. Culture	---	eyes Swap	---	Daily	2day	24 hrs at RT	24 hrs at RT	---	---
Microbiology	Eye Culture & Sensitivity	---	eyes Swap	---	8day	8day	24 hrs at RT	24 hrs at RT	---	---
Microbiology	Endocervix direct smear	---	Vaginal/prostati c/Urethra/disch arge	---	2day	2day	24 hrs at RT	24 hrs at RT	---	---
Microbiology	Endocervix culture	---	Vaginal/prostati c/Urethra/disch arge	---	8day	8day	24 hrs at RT	24 hrs at RT	---	---
Cytology	E-Prep	direct Smear	E Prep	---	6day	6day	---	---	---	---
Microbiology	Endocervix direct smear For BK	---	Vaginal/prostati c/Urethra/disch arge	---	8day	8day	24 hrs at 2-8°C	at 2-8°C	---	---
Immunology	Entamoeba Histolytica Ab (IgG)	Elisa	S	0.5	7day	7day	7 days at 2-8°C, 3months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S .vol l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Hormone	Erythro poeitin(E.P.O)	Elisa	S(After sampling and befor separating, sample must stored at 2-8°C, then seperated at refrigeerated centrifuge	0.5	11day	11day	4 days at 2-8°C Ur.: 1month at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	void repeated freeze/thaw cycles separated at refrigerated centrifug
Microbiology	Endometrial Smear for BK	---	Endometrial	---	8day	8day	24 hrs at 2-8°C	at 2-8°C	---	---
Microbiology	Endometrial Culture for BK	---	Endometrial	---	60day	60day	24 hrs at 2-8°C	at 2-8°C	---	---
Therapeutic drug monitoring	Ethosuximide	HPLC	S	0.5	Daily	2 day	2 days at 2-8°C ,for longer time at -20°C	at 2-8°C, at -20°C	---	---
Molecular diagnosis	EBV PCR(Quantitative)	Qualitave pcr	S ,PE	TIssue 5mm Other 1ml	10day	10day	WB : 8 hrs RT, 3 days 2-8 Others: 24 hrs RT , 5 days 2-8 1 yr -20°C Tissue Fresh Freeze 1 yr. Paraffin block at RT (unlimited)	at 2-8°C	incorrect	---

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample tyPE	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Toxicology	Ecstasy (MDMA)	Imm.Chrom	WB	10,50	Daily	next day	7 days at 2-8°C, 2months at -20°C	at 2-8°C, at -20°C	---	---
Biochemistry	Fasting Blood Sugar	Photometric	S ,PE	0.5	Daily	next day	1 day at 20-25°C 7 days at 4-8°C	at 2-8°C, at -20°C	Hemolysis	---
Biochemistry	FBS	Photometric	S ,PE	0.5	Daily	next day	1 day at 20-25°C 7 days at 4-8°C	at 2-8°C, at -20°C	Hemolysis	---
Hormone	Ferritin	ECL	S	0.5	Even days	next day	24 hrs at RT 7day at 2-8°C 1year at -20 °C	---	Hemolysis, Lipemic	Avoid repeated freeze / thaw cycles
Hormone	Folat RBC	CLIA	C.B.C	1,2	7day	7day	fast sending	at 2-8°C, at -20°C	---	---
Specific Biochemistry	Folic Acid	CLIA,ECL	S ,PH	0.5,1	5day	5day	2 hrs at 15-25°C 2day at 2-8°C 28day at 15-25°C	at 2-8°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Immunology	FTA Ab (IgG)	IF	S.CSF	0.5	10day	10day	4 hrs at 4-25°C, 2 weeks at -20°C , 3 months at -70°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Coagulation tests	FDP	Agglutination	PC(platelet - poor plasma)	1	Daily	2day	8 hrs at 20-25 °C ,one month at -20 °C	3 hrs.at 20-25 °C, at -20 °C	Hemolysis, Icteric, Lipemic	Serum or plasma must be seperated as soon as possible
Hormone	Fructosamine	Chemical	S	0.5	7day	7day	2 days at RT, 7 days at 2-8°C, 1 month at -20°C	at 2-8°C at -20°C	Gross Hemolysis	---

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Parasitology	F.I.O.B.T	Imm-chem	Stool	10	10day	10day	fast sending	fast sending	Not a blood sample and diarrhea	---
Coagulation tests	Fibrinogen	gravimetric	PC	3	Daily	next day	2 week at -20 °c 24 hrs at 2-8 °c 6hrs at RT	at 2-8 °c, at -20 °c	Clot ,Hemolys	Be separated quickly
Immunology	Factor XI	Coagulation	PC	1	7day	7day	2 hrs at RT, 14 days at -20 °c, 6months at -80 °c	at -20 °c	Hemolysis, Incorrect, anticoagulant	---
Coagulation tests	Factor VII	Coagulation	PC	1	10day	10day	2 hrs at RT, 14 days at -20 °c, 6months at -80 °c	at -20 °c	Hemolysis Incorrect anticoagulant	---
Coagulation tests	Factor X	Coagulation	PC	1	10day	10day	2 hrs at RT, 14 days at -20 °c, 6months at -80 °c	at -20 °c	Hemolysis Incorrect anticoagulant	---
PCR	Factor XIII	PCR	WB(EDTA)	1	17day	17day	1 week at 2-8 °c for longer time at -20	at 2-8 °c	---	---
Coagulation tests	Factor V	PCR	WB(EDTA)	1	13day	13day	1 week at 2-8 °c for longer time at -20 °	at RT, at 2-8 °	Hemolysis, Frozen, Clotting, Incorrect anticoagulant	Avoid repeated freeze/thaw cycles Be separated quickly/Two times centrifugation is preferred
Hormone	Free T3	Elisa	S	0.5	Sat	next day	2 days at 2-8 °c, >2Days: -20 °c	at 2-8 °c, at -20 °c	Hemolysis, Icteric, Lipemic	Avoid repeated freeze /thaw cycles
Hormone	Free T4	ELISA	S	0.5	Even days	next day	2 days at 2-8 °c, >2Days: -20 °c	at 2-8 °c, at -20 °c	Hemolysis, Icteric, Lipemic	Avoid repeated freeze /thaw cycles
Hormone	FSH	Elisa	S ,PH ,PE	0.5	Even days	next day	5 days at 2-8 °c, 1 yr -20 °c	at 2-8 °c, at -20 °c	Hemolysis, Icteric, Lipemic	---

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Hormone	Free estriol	CLIA	S, PH	0.5	Mon,Sat,Thu	next day	7 days at 2-8°C, 6months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Hormone	Free Testosterone	Elisa	S ,PH ,PE	0.5	10day	10day	5 days at 2-8°C, 1 yr -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Tumor Markers	Free PSA	CLIA	S	0.5	Even days	next day	1 day at 2-8°C, >1Days: -20 °C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Microbiology	Fungi Direct Smear	Direct smear	Skin,scalp,BF	---	Daily	21day	The same day must be analysis	---	---	Avoid using antibiotic, washing
Cytology	FNA (Fine Needle Asp)	Direct smear	BF	---	7day	7day	unlimited time for prepared slides	---	---	---
Parasitology	Fat Of Stool	sudan blachIII	Stool	0.5	6day	6day	1 hrs at RT 4day at 2-8°C, 14days at -20°C	at 2-8°C	---	---
Immunology	Free Beta HCG	CLIA	S	0.5	Sun,Wed	next day	7 days at 2-8°C, longer time at -20°C	at 2-8°C at -20°C	Hemolysis, Icteric, Lipemic	Cold chain compliance during transport. Avoid repeated freeze / thaw cycles
Coagulation tests	Factor VIII	Coagulation	PC	1	15day	15day	1 week at 2-8°C for longer time at -20°	at 2-8°C	---	---
Immunofluore scent	F.A.N.A	IFA	S	0.5	Tue	2next day	2 days at 2-8°C for longer time at -20°C	---	---	---

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S .vol (ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Hormone	Free Beta	CLIA	S	0.5	Sun, Wed	next day	7 days at 2-8°C, longer time at -20°C	at 2-8°C at -20°C	Hemolysis, Icteric, Lipemic	---
Microbiology	Fungi Culture	---	Skin, Scalp, nail, hair, BF,...	---	Daily	next day	BF: The same day must be tested Others: 5 days at RT	at RT	---	---
Hormone	Free cortisol	CLIA	U	5	13day	13day	7 days at 4-25°C	20-25°	---	---
Immunology	Free Kappa	Imm.Turb	U ,S	0.5,1	13day	13day	7 days at 2-8°C, 1months at -20°C	at 2-8°C, at -20°C	---	Avoid repeated freeze / thaw cycles
Immunology	Free Lambda	Imm.Turb	U ,S	0.5,1	13day	13day	7 days at 2-8°C, 1months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Serology	FTA absorption	IF	S.CSF	0.5	Wed	2day	4 hrs at 4-25°C, 2 weeks at -20°C , 3 months at -70°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Fasting is recommended
Coagulation tests	Factor II	Coagulation	PC	1	7day	7day	2 hrs at RT 14days at -20°C 6months at -80°C	at -20°C	Hemolysis, incorrect, anticoagulant	Avoid repeated freeze / thaw cycles Be separated quickly / Two times centrifugation is preferred.
Biochemistry	Glucose	photometric	S.PH.PE	0.5	Daily	next day	5 days at 2-8°C, 6months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	1 fasting blood sample and 4-5 blood sample after ingestion oral glucose (adults : 75 gr., children 1.75 gr. Per kg body weight, maximum 75 gr.) at 30, 60, 90, 120, 180 min.



Sector	Test	Assay method	Sample type	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Biochemistry	Gamma Glutamyl transferase	Photometric	PE, S	0.5	Daily	next day	7 days at 20-25°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Hormone	GH	ECL	S	0.5	10day	10day	1 week at 25°C , 3weeks at 4°C	at 2-8°C, at -20°C	Hemolysis	Fasting is recommended
Biochemistry	G.C.T	Photometric	PH ,PE, S	0.5	Daily	next day	5 days at 2-8°C, 6months at -20°C	at 2-8°C, at -20°C	---	1 fasting blood sample and 1
Biochemistry	G6PD	Photometric	C.B.C	1	Sat,Tue	next day	7 days at 2-8°C	at 2-8°C	Hemolysis	ingestion 50 gr.Oral glucose
Hormone	Growth Hormone	ECL	S	0.5	7day	7day	1 week at 25°C , 3weeks at 4°C	at 2-8°C, at -20°C	Hemolysis	Fasting is recommended
Hormone	Gastrin	CLIA	S,PE,PH	0.5	Sun	2day	5 hrs at 4°C ,30 days at -20°C ,for longer tme at -70°	0.5 hrs. 4-25°C , -20°C,-70°C	Hemolysis, Icteric, Lipemic	Rapidly seperated (at 2- 8°C).Avoid repeated freez/thaw cycles.Refrigerated Centrifuge Fasting The frozen sample

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Therapeutic drug monitoring	Gabapentin	HPLC	S	1	Every 4 days one	2day	2 days at 2-8°C for longer time at -20°	at 2-8°C, at -20°C	---	---
Hormone	Galactomenan	Elisa	S	0.5	8day	8day	at 2-8°C	at 2-8°C	---	---
Microbiology	Gastric Lavaage For Bk	---	Gastric Lavaage	---	8day	8day	24 hrs at 2-8°C,	24 hrs at 2-8°C	---	---
Biochemistry	GTT	Photometric	PE, PH,S	0.5	Mon,Sat	next day	5 days at 2-8°C, 6months at -20°C	at 2-8°C, at -20°C	---	1 fasting blood sample and 4-5 blood sample after ingestion oral glucose (adults : 75 gr., children 1.75 gr. Per kg body weight, maximum 75 gr.) at 30, 60, 90, 120, 180 min.
Microbiology	Giardia Antigen Stool	EliSa	S	2	10day	10day	2 days at 2-8°C, 1months Freeze	at 2-8°C	---	---
Biochemistry	H.D.L-c	Photometric	PE, PH,S	0.5	Daily	next day	7 days at 2-8°C, 3months at -20°C	at 2-8°C, at -20°C	Hemolysis	---

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample tyPE	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Specific biochemistry	Hb A1C	H.P.L.C	WB	3	Daily	6day	7days at 2-8 °c	---	---	---
Immunology	HLA-B5	PCR	WB(EDTA)	3	10day	10day	12 hrs at 2-8°C,	at 2-8°C	Hemolysis,clotting, frozen,incorrect, anticoagulant	---
Molecular diagnosis	HLA-B27	PCR	WB	3	13day	13day	12 hrs at 2-8 °c	at 2-8°C	Hemolysis,clotting, frozen,incorrect, anticoagulant	---
Immunology	HLA-B51	PCR	WB(EDTA)	3	14day	14day	12 hrs at 2-8°C,	at 2-8°C	Hemolysis, Clotting, Frozen, Incorrect, anticoagulant	---
Immunology	HLA-B8	PCR	WB(EDTA)	3	9day	9day	12 hrs at 2-8°C	at 2-8°C	Hemolysis,clotting, frozen,incorrect, anticoagulant	---
Hormone	HLA DQ2 HLA DQ8	PCR	WB	10cc	13day	13day	7 days at 2-8°C	at 2-8°C	Hemolysis, Icteric, Lipemic	---
Immunology	HLA-DR4 HLA-DR3	PCR	WB(E or H)	3	13day	13day	12 hrs at 2-8°C	at 2-8°C	Icteric,	---
Pathology	Her2(fish)	Sectioning and Staining	Block	---	20day	20day	at RT	at RT	Lipemic	همراه داشتن تمامی فرم های مولکولی و پاتولوژی و جواب آن الزامی میباشد
Immunology	Heterophile Ab (Paul Bunnell)	Hemagglutination	S	1	7day	7day	1 week at 2-8°C,	at 2-8°C	---	---

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S .vol l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Immunology	Helicobacter pylori (IgG)	Elisa	S,PH,PE	0.5	Even days	next day	2 days at 2-8°C >2 days: -20 °C	---	---	---
Immunology	Helicobacter pylori (IgA)	Elisa	S,PH,PE	0.5	Sat,Tue	next day	2 days at 2-8°C >2 days: -20 °C	---	---	---
Immunology	HSV Ab 1+2 (IgG) HSV Ab 1+2 (IgM)	Elisa	S	0.5	10day	10day	1week at 2-8°C for longer time at -20°C	at 2-8°C, at -20°C	Hemolysis,Icteric	Avoid repeated freeze / thaw cycles
Immunology	HIV P 24 Ag	Elisa	S	0.5	Mon,SatThu	next day	7 days at 2-8°C for longer time at -20°C	at 2-8°C, at -20°C	---	---
Immunology	HBs Ag	Elisa	S,PH,PE	0.5	Daily	2day	7 days at 2-8°C for longer time at -20°C	---	---	---
Immunology	HBs Ab	Elisa	S,PH,PE	0.5	Sat,Tue	next day	7 days at 2-8°C for longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Lipemic	---
Immunology	Helicobacter pylori (IgM)	Elisa	S,PH,PE	0.5	Sun,Wed	next day	2 days at 2-8°C >2Days: -20 °C	---	---	---
Immunology	HCV Ab	ECL	S,PH,PE	0.5	Even days	next day	7 days at 2-8°C for longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---

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Sector	Test	Assay method	Sample type	S .vol l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Immunology	HBe Ag HBe Ab	ELFA	S,PE	0.5	10day	10day	1 week at 2-8°C, for longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Immunology	HBc Ab (Total)	Elisa	S, PE	0.5	5day	5day	1 week at 2-8°C, for longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Immunology	HBc Ab (IgM)	Elisa	S, PE	0.5	8day	8day	1 week at 2-8°C, for longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Immunology	HAV Ab (Total)	ELFA	S,PE	0.5	Sun ,Wed	2 day	1 week at 2-8°C for longer time at -20°C	at 2-8°C, at -20°C	Hemolysis	---
Immunology	HAV Ab (IgM)	Elisa	S	0.5	7day	7day	1 week at 2-8°C, for longer time at -20°C	at 2-8°C, at -20°C	Hemolysis	---
Immunology	HDV Ab	Elisa	S, PE, PH, BF	0.5	Mon,Thu	2day	5 days at 2-8°C, for longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Immunology	H.pylori Ag (Stool)	ELISA	Stool	1	Sat,Tue	next day	2 days at 2-8°C for longer time at -20°C	---	---	Avoid repeated freeze / thaw cycles
Immunology	Hydatid Ab (IgG)	Elisa	S,PE	0.5	7day	7day	1 week at 2-8°C, for longer time at -20°C	at 2-8°C, at -20°C	---	---
Biochemistry	Homocysteine	Colorimetry	S	0.5	6day	6day	1 hrs at 0°C	0.5 hrs at 0°C	Hemolysis, Lipemic	---
Hematology	Hemoglobin	cell counter	Wb	0.5	Daily	next day	4 hrs at RT, 1 days at 2-8°C	at 2-8°C	Hemolysis,clotting, frozen,incorrect, anticoagulant	---

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Sector	Test	Assay method	Sample type	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Electrophoresis	Hb Electrophoresis	Electrophoresis	PE	3	7day	7day	7 days at 2-8°C	at 2-8°C	Clotting	---
Hormone	Haptoglobulin	Immunoassay	S,PE,PH	0.5	Thu	2 day	1 week at 2-8°C for longer time at -20°	at 2-8°C, at -20°C	Hemolysis	---
Tumor Markers	Human epididymis protein 4	ECL	S	0.5	Thu	1day	1 day at 2-8°C, for longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Urine Hormone	Homovanillic acid (Urine.24h)	HPLC	U	20	30day	30day	7 days at 2-8°C, 3months at -20°C	at 2-8°C, at -20°C	---	---
Immunology	HSV Ab 1+2 (IgG) HSV Ab 1+2 (IgM)	CLIA	S,PH,PE	0.5	7day	7day	4 hrs at RT, 7days at 2-8°C 3months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric,	Avoid repeated freeze / thaw cycles
Molecular diagnosis	HSV 1 PCR	Qualitative pcr	CSF, S, WB (EDTA), Tissue, Respiratory Sample, PC (E), Dermal & Genital (vaginal & cervix) Lesion or Swab, Amniotic fluid, Thin prep, Ocular diS.	---	8day	8day	---	---	---	---

آزمایشگاه پاتوبیولوژی شهریار

Sector	Test	Assay method	Sample type	S .vol l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Molecular diagnosis	HBV viral load	Real time pcr	S ,PE	1	8day	8day	3 days at RT 7 days at 2-8°C, 6 week at < -20°C	at 2-8°C, at or < -20°C	incorrect, anticoagulant, (heparin) Hemolysis	---
Molecular diagnosis	HCV PCR	Real time pcr	S, PE	0.5	8day	8day	at -20°C	at -20°C	incorrect	---
Molecular diagnosis	HCV genotyping	PCR	PE	1	8day	8day	1 day at 2-8°C for longer time at -20°C	---	---	---
Immunology	HEV.Ab	Elisa	S	0.5	Mon	2day	1 week at 2-8°C, longer time at -20,	at 2-8°C at -20°C	Hemolysis, Icteric	---
Molecular diagnosis	HDV PCR	Qualitative pcr	PE,S	1	8day	8day	at -20°C	at -20°C	---	---

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Sector	Test	Assay method	Sample type	S.vol (ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Molecular diagnosis	HCV viral load (Quantitative)	Real time	S, PE	0.5	8day	8day	at -20°C	at -20°C	incorrect	---
Molecular diagnosis	HTLV PCR	Qualitative pcr	WB (EDTA),CSF	1	8day	8day	2 days at RT, 2week at 2-8°C	at 2-8°C	incorrect, anticoagulant, (heparin) Hemolysis, FROZEN SAMPLE CLOTTING	---
Molecular diagnosis	HPV genotyping	Real time pcr-blottir	L.B.C	0.5	8day	8day	at 2-8°C	---	incorrect	---
Hormone	Islet cell Ab	IFA	S	0.5	13day	13day	at 2-8°C, at -20°C	at 2-8°C, at -20°C	---	---
Hormone	intrinsic factor	Elisa	S	0.5	8day	8day	at 2-8°C, at -20°C	at 2-8°C, at -20°C	---	---
Serology	Indirect Coombs	Agglutination	S	0.5	Daily	next day	7 days at 2-8°C 1months at -20°C 1days at RT	at 2-8°C, at -20°C	---	---
Immunoglobulins	IgASerum	Imm.Turb	S,PH,PE	0.5	Thu,Sat	next day	7 days at 2-8°C, 3months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Immunoglobulins	IgGSerum	Imm.Turb	S,PH,PE	0.5	Thu,Sat	next day	7 days at 2-8°C, 3months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S .vol (ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Immunoglobulins	IgM Serum	Imm. Turb	S, PH, PE	0.5	Thu, Sat	next day	7 days at 2-8°C, 3 months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Immunoglobulins	IgE Serum	CLIA	S, PH, PE	0.5	7 day	7 day	7 days at 2-8°C, 3 months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Immunology	Igra (Quanti Fon)	Elisa	Special tube	5	7 day	7 day	After sample treatment 28 days at 2-8°C or 3 months at -20°C	at 2-8°C	Hemolysis, gross	---
Hormone	IGFBP-3	CLIA	S	0.5	8 day	8 day	6 hrs at 2-8°C for longer time at -20°C	at 2-8°C, at -20°C	---	Rapidly separated (at 2-8°C) Fasting is recommended
Hormone	IL-6	ECL	S, PE, CSF	0.5	10 day	10 day	2 months at -20°C CRITICAL FROZEN	at -20°C	Hemolysis, Icteric, Lipemic	Be separated quickly
Parasitology	IHC	---	Biopsy, block	---	15 day	15 day	Minimum 1 year after fixation (tissue) or block preparation.	at RT	---	---
Immunology	Inhibin-A	Elisa	S, PH	0.5	Mon, Sat, Thu	next day	7 days at 2-8°C, 3 months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Hormone	Insulin	ECL	PH, PE, S	0.5	7 day	7 day	5 days at 2-8°C, 1 months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Be separated quickly
Hormone	IGF-1	Elisa	S	0.5	10 day	10 day	6 hrs at 2-8°C for longer time at -20°C	at 2-8°C at -20°C	Hemolysis, Icteric, Lipemic	Fasting is recommended Rapidly separated (at 2-8°C)
Immunology	Immuno Electrophoresis	Electrophoresis	U	10	10 day	10 day	2 days at 2-8°C, for longer time at -20°C	at 2-8°C, at -20°C	---	---

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Sector	Test	Assay method	Sample type	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Immunology	Immuno Electrophoresis	Electrophoresis	S	0.5	7day	7day	2 days at 2-8℃ ,for longer time at -20℃	at 2-8℃, at -20℃	---	---
Immunology	IgG Subclass 1-2-3	Nephelometry	S	1	10day	10day	1 week at 2-8℃ for longer time at -20°	at 2-8℃, at -20℃	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles Fasting is recommended
Hormone	Iso hemeagglutiniue (Anti B)	Agglutination	S	0.5	5day	5day	7 days at 2-8℃, for longer time at -20℃	at 2-8℃, at -20℃	Hemolysis, Icteric, Lipemic	---
Hormone	Iso hemeagglutiniue (Anti A)	Agglutination	S	0.5	5day	5day	7 days at 2-8℃, for longer time at -20℃	at 2-8℃, at -20℃	Hemolysis, Icteric, Lipemic	---
Molecular diagnosis	Jak-2(V617F) mutation	PCR	WB(EDTA)	5	18day	18day	2 days at RT, 5 days at 2-8℃	at 2-8℃	---	---
Therapeutic drug monitoring	Keppra (levetiracetam)	Elisa	S,U	1	5day	5day	1 week at 25℃, 3 weeks at 4℃	at 2-8℃, at -20℃	---	---
Biochemistry	L.D.L-c	photometric	PH ,PE, S	0.5	Daily	next day	7 days at -20℃	at 2-8℃, at -20℃	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Biochemistry	Lactat Dehydrogenase (LDH)	photometric	PH ,PE, S	0.5	Daily	next day	6 week at -20℃	at 2-8℃	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Therapeutic drug monitoring	Lamotrigine	HPLC	S	0.5	8day	8day	2 days at 2-8℃ ,for longer time at -20℃	at 2-8℃, at -20℃	---	---
Electrolytes	Lithium	ISE	S	0.5	Daily	next day	1 day at 2-8℃, 3months at -20℃	at 2-8℃, at -20℃	Hemolysis	---

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Sector	Test	Assay method	Sample type	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Biochemistry	Lipase	Photometric	S	0.5	Even days	2day	1 week at 25°C, 3 weeks at 4°C	at 2-8°C, at -20°C	---	Fasting is recommended
Biochemistry	Latex(Quantitative)RF	Turbidimetric	S	0.5	Daily	next day	7 days at 2-8°C, 3months at -20°C	---	Hemolysis	---
Immunology	Listeria Ab (IgG) Listeria Ab (IgM)	IFA	S	0.5	10day	10day	1week at 2-8°C, for longer time at -20°C	at 2-8°C, at -20°C	---	---
Immunology	LKM Ab	IFA	S	0.5	10day	10day	7 days at 2-8°C, 3months at -20°C	at 2-8°C, at -20°C	---	---
Hematology	LE. Cell	بررسی اسمیر	WB	10	2day	2day	The same time must be tested	---	---	---
Hormone	L.H	Elisa	PH ,PE, S	0.5	Even days	next day	3 days at 2-8°C, 1months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Hormone	Leptin	Elisa	S	0.5	33day	33day	4 days at 4°C for longer time at -20°C	at 2-8°C, at -20°C	---	Fasting is recommended
parasitology	Leishman Body	Slide	Skin wound dis,BMA BMA	2slide	2day	2day	Unlimited after fixation at RT	at RT	---	---
Microbiology	Lactoferrin	Elisa	Stool	2	9day	9day	5 days at 2-8°C, 14 day sat -20°C	at 2-8°C, at -20°C	---	Avoid repeated freeze / thaw cycles
Body Fluid Examination	Lactat Dehydrogenase (body fluid)	Photometric	pH, BF, CSF	1	Daily	next day	1 day at 2-8°C, 1months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	separated with in 20 min.

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Sector	Test	Assay method	Sample type	S .vol (ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Biochemistry	Lactate	Chemical	Ph	1	4day	4day	24 hrs at 20-25°C, do not freeze sample	at RT	Hemolysis, Icteric, Lipemic	no use monitol
Specific Biochemistry	Lipoprotein a	Imm.Turb	S,PH ,PE	0.5	8day	8day	immediately at 2-8°C, at -20°C (up to Analyse)	at 2-8°C, at -20°C	---	Serum or plasma must be separated as soon as possible.Fasting is recommended
Immunology	Lupus Anti Coagulant	Coagulation	PC	2	7day	7day	up to 4 hrs at (20-5°C, 20+5°C) up to 1 month at -20°C ,	1 hrs at RT, -20°C	Clot, Incorrect, anticoagulant, Icteric for non-coagulation method.	Avoid repeated freeze / thaw cycles. Be separated quickly / Two times centrifugation is preferred.
Microbiology	Lymph Node Culture for BK	---	Lymph Node	---	60day	60day	24 hrs at 2-8°C	24 hrs at 2-8°C	insufficient	---
Biochemistry	Lipoprotein Electrophoresis	Electrophoresis	S	0.5	Every10 days one	2day	1 week at 4°C for longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic Frozen	---
Biochemistry	Mg	Colorimetry	PH ,PE, S	0.5	Daily	next day	7 days at 2-8°C, 1year at -20°C	at 2-8°C, at -20°C	---	Avoid repeated freeze / thaw cycles
Serology	2 Mercaptoethanol (2ME)	Agglutination	S	0.5	3day	3day	7 days at 2-8°C, 3months at -20°C	at 2-8°C, at -20°C	Hemolysis	---

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Serology	Mono test	Agglutination	S	0.5	17day	17day	7 days at 2-8°C, 3months at -20°C	at 2-8°C, at -20°C	Hemolysis	---
Immunology	Mycoplasma P.Ab (IgG)	Elisa	S,PH,PE	0.5	9day	9day	7 days at 2-8°C, 3months at -20°C	at 2-8°C, at -20°C	Hemolysis	---
Immunology	Mycoplasma P.Ab (IgM)	Elisa	S,PH,PE	0.5	9day	9day	7 days at 2-8°C, 3months at -20°C	at 2-8°C, at -20°C	Hemolysis	---
Immunology	Mycoplasma Ab	Elisa	Vaginal, Urethral, Urine, Semen	---	7day	7day	6 hrs. at RT, 1 day at 2-8°C in transport media	at 2-8°C in transport media	---	---
parasitology	Malaria	بررسی اسمیر خون محیطی و نوک انگشت	PE	3	2day	2day	Unlimited after fixation at RT	---	---	---
Biochemistry	Magnesium (Mn)	Photometric	BF,PH,S ,U(R&24)	0.5,1	17day	17day	7days at 2-8°C, 3months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Hematology	mixed PTT0	Coagulation	PC 3/2%	3	Daily	next day	2 hrs at RT, 24 hrs at 2-8°C 2 hrs at -20°C	---	Clot	---
Hematology	mixed PT 60 min	Coagulation	PC 3/2%	3	Daily	next day	12 hrs at RT 24 hrs at 2-8°C, 2week at -20°C	at 2-8°C, at -20°C	Clot	---
Microbiology	Mens.Blood Culture For Bk	---	Blood	---	60day	60day	24 hrs at 2-8°C,	at 2-8°C	---	---
Stone Analysis	Magnesium Hydrogen Phosphate	photometric	S,U	0.5,1	Daily	next day	7 days at 2-8°C, 3months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Metabolic disorders	Mucopolysaccharides (MPS) urine	Chemical	U	5	7day	7day	1 month at -20°C CRITICAL FROZEN	at -20°C	---	---
Molecular diagnosis	MY. tuberculosis complex (MTC)PCR	Real time pcr	Urine,Sputum	0.5	8day	8day	at 2-8°C	at 2-8°C	Incorrect	---
Molecular diagnosis	MTHFR (C677T)Mutation(E)	pcR	WB	5	11day	11day	3 days at RT 1week at 2-8°C	at 2-8°C	frozen,incorrect, anticoagulant,clotting, hemolysis	---
Molecular diagnosis	MTHFR (A1298C)Mutation(E)	Real time pcr	WB	5	11day	11day	at 2-8°C	at 2-8°C	incorrect	---
Metabolic disorders	MSUD test (DNPH test)	TLC	Filter Pape	4 drop	Daily	5day	4 days at 2-8°C , 1month at -20°C	at 2-8°C, at -20°C	---	---
Hormone	Mercury (HG)	Atomic abs	WB (E), U (R), (24h)	2	12day	12day	5 days at RT, 7 days at 2-8°C, 1 month at -20°C	at RT, at 2-8°C	Clotting, Incorrect, anticoagulant	---
Microbiology	Menstruation blood Direct Smear	---	Blood	---	2day	2day	at RT fast sending	at RT fast sending	---	---
Microbiology	Menstruation blood Culture & Sensitivit	---	Blood	---	8day	8day	at RT fast sending	at RT fast sending	---	---
Microbiology	Nasal Direct Smear	---	Wet Swap	---	2day	2day	24 hrs at RT	24 hrs at RT	---	---
Hematology	NBT	---	WB(EDTA)	1	7day	7day	The same day at 2-8°C	at 2-8°C	Hemolysis, Frozen, Clotting, Incorrect anticoagulant	---

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Immunology	Neuromyelitis Optica (NMO) antibody	IFA	S,PE,PC,CSF	1	10day	10day	7 days at 2-8°C, 1 month at -20°C	at 2-8°C, at -20°C	Hemolysis, Lipemic, Icteric	---
Microbiology	Nasal Culture & Sensitivity	---	Wet Swap	---	8day	8day	24 hrs at RT	24 hrs at RT	---	---
Immunoglobulins	Neuronal Ab(Paraneo)	Immunoblot	S	1	10day	10day	5 days at 2-8°C, 2months at -20°C	at 2-8°C, at -20°C	Gross: Hemolysis, Lipemic	---
Urine Analysis	NMP22	Imm.Chrom	U	5	5day	5day	2 hrs at RT	at RT	---	---
Microbiology	Neck Aspiration Culture For BK	---	Neck	---	60day	60day	24 hrs at 2-8°C	24 hrs at 2-8°C	---	---
Microbiology	Neck Aspiration direct.S For BK	---	Neck	---	Daily	next day	24 hrs at 2-8°C	24 hrs at 2-8°C	---	---
Microbiology	Neck Aspiration Culture	---	Neck	---	8day	8day	at RT fast sending	at RT fast sending	---	---
Hematology	Osmotic Fragility test	Hemolysis- Photometric	WB(EDTA)	3	10day	10day	The same day at 2-8	at 2-8°C	Hemolysis, Frozen, Clotting, Incorrect anticoagulan	Fasting is recommended
Hormone	17-OH Progesterone	Elisa	PH ,PE, S	0.5	10day	10day	5 days at 2-8°C, 1months at -20°C	---	---	---

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample tyPE	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Biochemistry	OsmolalitySerum/Urin	S:Calculation U:Refractometer	S,U	1	5day	5day	7 days at 2-8°C, 2months at -20°C	at 2-8°C, at -20°C	---	---
Hormone	Osteocalcin	ECL	S.PH	0.5	24day	24day	2 days at 2-8°C for longer time at -20°	at 2-8°C, at -20°C	---	Protect the light
Cytology	Fluid cytology	Direct smear	BF,U	---	7day	7day	The same time must vbe analysis	at 2-8°C	---	---
Biochemistry	Phosphorus	photometric	S	0.5	Daily	next day	4 hrs at RT 4days at 2-8°C, 3months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Electrolytes	Potassium	ISE	S,U	0.5	Daily	next day	7 days at 2-8°C, 3months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Specific Biochemistry	Pb(Lead)	Atomic abs	C.B.C	2	4day	4day	5days at RT, 7Days at 2-8°C, 1month at -20°C	at 2-8°C, at -20°C	Incorrect, anticoagulant, Clotting	---
Metabolic disorders	Phenylketonurina	---	U	10	5day	5day	2days at 2-8°C, at -20°C	at 2-8°C, at -20°C	Hemolysis	---
Coagulation tests	PT.Patient	Coagulation	PC	3	Daily	next day	12 hrs at RT 24 hrs at 2-8°C 2week at -20°C	at 2-8°C	Clot severe ,Hemolysis	Be separated quickly
Coagulation tests	PTT Patient	Coagulation	PC	3	Daily	next day	2 hrs at RT 24 hrs at 2-8°C 2week at -20°C	at 2-8°C	Clot severe ,Hemolysis	---

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S .vol l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Hematology	PBS requested	wright giesma stain	WB	1	Daily	next day	4 hrs at RT 1days at 2-8°C,	at 2-8°C	Hemolysis, clotting, frozen, incorrect, anticoagulant	---
Tumor Markers	P.S.A	CLIA	S, Ph	0.5	Even days	next day	2 days at 2-8°C, 3months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Hormone	Prolactin(Macro)	ELISA	S	0.5	5day	5day	1 week at 2-8°C for longer time at -20°	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Rapidly seperated (at 2-8°C)
Hormone	Prolactin	ELISA	S ,pH, PE	0.5	1day	1day	4 days at 2-8°C, 3 months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Immunology	P-ANCA	Elisa	S	0.5	13day	13day	2 days at 2-8°C for longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Hormone	Progesterone	ELISA	S ,pH, PE	0.5	Thu, Sat	next day	5 days at 2-8°C, 1months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Hormone	P.T.H	CLIA	S ,pH, PE	0.5	Sun	next day	2days at 2-8°C, 3months at -20 °C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Therapeutic drug monitoring	Phenytoin	Fluorescence polarization	S	1	Daily	3day	2 days at 2-8°C for longer time at -20°C	at 2-8°C, at -20°C	---	---
Immunology	Procalcitonin	Elisa	S, PE, PH	1	Sat, Tue	2day	5 days at 2-8°C , 1month at -20°C	at 2-8°C, at -20°C	Hemolysis	---
Therapeutic drug monitoring	Phenobarbital	Fluorescence polarization	S	1	7day	7day	2 days at 2-8°C for longer time at -20°	at 2-8°C, at -20°C	---	---

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S.vol. l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Molecular diagnosis	Prothrombin G20210A or FII Mutation(E)	PCR	WB(EDTA)	---	13day	13day	1 week at 2-8°c for longer time at -20°	---	---	---
Coagulation tests	Protein C	Clotting	PC	0.5	6day	6day	up to 4 hrs at 20±5°c up to 1month at -20°c,6 m.at -70°	at -20°c at -70°c	Clot, Icteric, Incorrect anticoagulant Icteric & Lipemic for non coagulation method	Serum or plasma must be seperated as soon as possible. Must be analysed until 4 hrs.,2 weeks -20°c or 6 months -70°c.avoid repeated freeze/thaw cycles Be separated quickly/Two times centrifugation is preferred
Coagulation tests	Protein S	clotting	PC	2	6day	6day	up to 4 hrs at 18-25°c up to 1month at -20°c.,6 m.at -70°c	at -20°c at -70°c	Clot, Icteric, Incorrect anticoagulant Icteric & Lipemic for non coagulation method	Serum or plasma must be seperated as soon as possible. Must be analysed until 4 hrs.,2 weeks -20°c or 6 months -70°c.avoid repeated freeze/thaw cycles Be separated quickly/Two times centrifugation is preferred
Cytology	Pap Smear(slide)	direct Smear	Smear	---	6day	6day	at RT	at RT	---	---

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S .vol l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Hormone	Phenylalanine	HPLC	P	1	7day	7day	2 weeks at -20°c	at -20°c	Hemolysis	Avoid freeze/ thaw cycles Be separated quickly Fasting 3-6 hours
Biochemistry	Protein Electrophoresis	Electrophoresis	S	0.5	7day	7day	4 days at 2-8°c for longer time at -20°c	---	Hemolysis	---
Microbiology	Prostate Massage Discharge/culture	Aerobic	Prostatic dis	---	2day	2day	swap: 24 hrs at RT Inside the tube : fast sending	swap: 24 hrs at RT ,Inside the tube: fast sending	---	---
Microbiology	Pleural Fluid D.S smear/CBC	---	Pleural	---	2day	2day	24 hrs at 4°c	in the fastest time possible	---	---
Microbiology	Perianal Direct Smear/CBC	---	Perianal	---	2day	2day	fast sending	in the fastest time possible	---	---
Molecular diagnosis	PAI-1 (844 A/G)E	PCR	WB(EDTA)	---	7day	7day	1 week at 2-8°c for longer time at -20	---	---	---
Molecular diagnosis	PAI-1(675 4G/5G)E	PCR	WB(EDTA)	---	11day	11day	1 week at 2-8°c for longer time at -20	---	---	---
Immunology	PAPP-A	CLIA	S	0.5	Sun,Wed	next day	5 days at 2-8°c, 3 months at -20°c	at 2-8°c, at -20°c	Hemolysis, Icteric, Lipemic	---

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S .vol (ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Coagulation tests	PT mixing	Coagulation	PC 3/2%	3	2day	2day	12 hrs at RT 24 hrs at 2-8°C 2week at -20°C	at 2-8°C, at -20°C	Clot severe ,Hemolysis	Be separated quickly
Microbiology	Pleural Direct smear (BK)	---	Pleural	---	8day	8day	24 hrs at 2-8°C	24 hrs at 2-8°C	---	---
Microbiology	Pleural Culture For BK	---	Pleural	---	60day	60day	24 hrs at 2-8°C	24 hrs at 2-8°C	---	---
Blood bank	Panel reactive Ab	---	S	1	8day	8day	at 2-8°C	at 2-8°C	Hemolysis	---
Urine Analysis	Phosphorus	photometric	U,S	0.5	Daily	next day	4 hrs at RT 4days at 2-8°C, 3 months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Immunology	Parietal cell	IFA	S	0.5	7day	7day	5days at 2-8°C , 3 months at -20°C	at 2-8°C, at -20°C	---	---
Specific Biochemistry	Pro BNP	ECL	S	1	10day	10day	6 days at 2-8°C, 3 months at -20°C	at 2-8°C, at -20°C	Hemolysis	---
Immunology	Pyovate	Chemical	WB on cold Perchloric acid (0.6 M)	1	7day	7day	After preparation: 7 days at 2-8°C 3 months at -20°C	at 2-8°C, at -20°C	Hemolysis	Be separated quickly. Sample collecting with cold tube & syringe
Hormone	Pemphigus Ab	IFA	S	0.5	10day	10day	5 days at 2-8°C, 3 months at -20°	at 2-8°C, at -20°C	---	---
Immunology	Parvovirus(B19) IgG Parvovirus(B19)IgM	Elisa	S,BF,CSF	0.5	13day	13day	2 days at 2-8°C for longer time at -20	at 2-8°C, at -20°C	---	---

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample tyPE	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Hormone	Primidone	HPLC	S	0.5	Daily	2day	2 days at 2-8 °c for longer time at -20 °c	at 2-8 °c, at -20 °c	---	---
Genetics	QF PCR(Aminosantez)	QF PCR	PE	20	5day	5day	Fast sending at 2-8 °c	at 2-8 °c	---	---
Parasitology	Reducing Substance (Stool)	Chemical	Stool	2	10day	10day	2 days at 2-8 °c, 14 days at -20 °c	at 2-8 °c at -20 °c	---	---
Hormone	Renin	Elisa	PE	1.5	9day	9day	4 hrs. at RT, for longer time Rapidly store at -20 °c	at -20 °c	Hemolysis, Icteric, Lipemic Incorrect anticoagulan	Avoid freeze / thaw cycles samples must be done at the usual temperature (15-25 °c) , and centrifuged at room temperature and must be frozen immeediatell
Urine Biochemistry	Random Urine Phoshorus	photometric	U	10	Daily	next day	2days at RT, PH:5	at 2-8 °c, at -20 °c	---	---
Immunology	Rast Test (Mix allergy panel)	Immunoblot	S	1	7day	7day	---	---	---	---
Molecular diagnosis	Rubella PCR	PCR	Sput.,tissue, BF	---	7day	7day	1 week at 2-8 °c for longer time at -20 °	---	---	---

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Hormone	Rubella Ab-IgM(Capture)	Elisa	S, PH	0.5	Daily	next day	7 days at 2-8°C, 3 months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Electrolytes	Sodium	ISE	S,U	0.5	Daily	next day	7 days at 2-8°C, 3 months at -20°C	at 2-8°C, at -20°C	Hemolysis	---
Biochemistry	SGOT(A.S.T) SGPT (A.L.T)	photometric	S	0.5	Daily	next day	3 months at -20°C	at 2-8°C, at -20°C	Hemolysis	Avoid repeated freeze / thaw cycles
Genetics	Sex-determination	NGS	WB	10	10day	10day	2days at 2-8°C	at' 2-8°C	Hemolysis	---
Biochemistry	Serum Iron	photometric	S,PH	0.5	Daily	next day	4days at RT 7 Days at 2-8° c	at 2-8°C, at -20°C	---	Avoid repeated freeze / thaw cycles Patient's age and sex.
Hormone	S.H.B.G	ECL	S	0.5	Tue	1day	2 days at 2-8°C for longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Molecular diagnosis	SARS-CoV-2(COVID-19)- PCR	Real time pcr	WB Throat, Nose Swap	0.5	Daily	next day	at 2-8°C	at 2-8°C	Incorrect	---
Hormone	Strongyloides ster.Ab	Elisa	S	0.5	8day	8day	5 days at 2-8°C, 2 months at -20°C	at 2-8°C at -20°C	Hemolysis	---
Biochemistry	Selenium	Atomic	S	0.5	10day	10day	1 week at 2-8°C for longer time at -20°	at 2-8°C at -20°C	Hemolysis, Icteric, Lipemic	---

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Microbiology	Stool culture & Sensitivity	Aerobic	Stool	1	4day	4day	Unpreservative: 2 hrs. at RT preservative 2 days at RT or 2-8°C	With preservative (Carry blair media): 2 days at RT or at 2-8°C	frozen sample	---
Microbiology	Sputum Direct Smear (BK)	---	Sputum	---	8day	8day	7 days at 2-8°C	24 hrs at 2-8°C	---	---
Microbiology	Semen Culture & Sensitivity	Aerobic	Sputum	1	8day	8day	2 hrs at RT 1days at 2-8°C,	at 2-8°C	---	---
Microbiology	Sputum Direct Smear.	---	Sputum	---	3day	3day	24 hrs at 4°C	24 hrs at RT	---	---
Microbiology	Sputum Culture & Sensitivity	---	Sputum	---	8day	8day	24 hrs at 4°C	24 hrs at RT	---	---
Microbiology	Synovial Culture & Sensitivity	---	Synovial	---	8day	8day	6hrs at 37°C 3days at 4°C	in the fastest time possible	---	---
Hormone	Sirolimus	CLIA	WB	2	5day	5day	7 days at 2-8°C, 2 months at -20 °C	at 2-8°C, at -20°C	Hemolysis, Clotting, Frozen, Incorrect, anticoagulant	---

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample tyPE	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
parasitology	Stool elastase	Elisa	Stool	3	9day	9day	2 days at RT, 7 days at 2-8°C, 6 months at -20 °C	at RT, at 2-8°C, at -20°C	---	---
Parasitology	Stool Examination	بررسی لام به صورت مستقیم	Stool	1	2day	2day	---	2-8 hrs at RT	frozen sample, Specimens containing barium,oil or urine	---
parasitology	Scotch TEST	بررسی لام زیر میکروسکوپ	---	---	Daily	next day	---	---	---	---
Stone Analysis	Stone Analysis	---	Urinary tract Stone	---	2day	2day	at RT	at RT	---	---
Body Fluid Examination	Synovial fluid	Aerobic & Ana	Synovial Fluid	2	2day	2day	the same time must be tested	at RT	---	---
Parasitology	Stool Trypsin Activity	Chemical	Stool	0.5	8day	8day	7 days at -20°C	at -20°C	specimen scontaining barium	---
Microbiology	Sputum Culture For BK	Aerobic	Sputum	1	60day	60day	2hrs at RT, 1 day at 2-8 °C	at 2-8°C	---	---
Microbiology	Supra Pabic Urine culture & Sensitivity	---	U	---	3day	3day	fast sending	at RT fast sending	---	---

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Immunology	Serotonin	Hplc	S , U 24h (Hcl)	1	35day	35day	2 months at -20°c	at -20°c >-20°c	Hemolysis, Icteric, Lipemic	---
Immunology	SARS-COV-2Ab (Covid-19) IgM SARS-COV-2Ab (Covid-19) IgG	Elisa	PE,PH,PC	0.5	6day	6day	2days at 2-8 °c,	---	---	---
Immunology	Specific IgE(Respiratory)	Immunoblot	S	1	7day	7day	7 days at 2-8°c, 3 months at -20°c	at 2-8°c, at -20°c	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Microbiology	Seminal Direct Smear (BK)	Chemical	Seminal	0.5	8day	8day	The same time must be tested. Post vasectomy 1 day at RT or 2-8°c.	---	Mixing sample with water, urine	---
Microbiology	Saliva Secretion Culture & Sensitivity	---	Saliva	---	8day	8day	at RT fast sending	at RT fast sending	---	---
Microbiology	Saliva Secretion Direct Smear	---	Saliva	---	2day	2day	at RT fast sending	at RT fast sending	---	---
Biochemistry	Triglyceride	photometric	PH,PE ,S	0.5	Daily	next day	2 days at 15-25°c, 7 days at 2-8°c, 1year at -20°c	at 2-8°c, at -20°c	Hemolysis	Avoid repeated freeze / thaw cycles
Hormone	Troponine I	ECL	S.	0.5	5day	5day	2 days at 2-8°c for longer time at -20°c	at 2-8°c, at -20°c	Hemolysis, Icteric, Lipemic	---

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Biochemistry	Total Protein	photometric	PH,PE ,S	0.5	Daily	next day	6 days at 15-25°C 4week at 2-8°C, 1year at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Biochemistry	Total Lipid	Colorimetry	S	1	Daily	2 day	5 days at 2-8 °C for longer time at -20°C	at 2-8°C, at -20°C	frozen sample	Fasting
Biochemistry	Transferrin	Imm.Turb	PH,PE ,S	0.5	Daily	next day	8 days at 2-8°C, 6 months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Microbiology	Tuberculin Test(PPD)	Skin Test	---	---	4day	4day	---	---	---	---
Immunology	Toxocara Ab (IgG)	Elisa	PH,PE ,S,BF	0.5	10day	10day	1week at 2-8°C, for longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid freez/ thaw cycles
Hormone	Total Thyroxine (T4)	CLIA	PC,PH,PE ,S	0.5	2day	2day	1 day at RT, 7 days at 2-8°C , 1 month at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid freeze / thaw cycles
Immunology	Toxo(IgG)Avidity	ECL	S	0.5	10day	10day	1 week at 2-8°C for longer time at -20°	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid repeated freez/ thaw cycles Avoid using iron supplement
Therapeutic drug monitoring	Topiramate	HPLC	S	1	Every 4 days one	2day	2 days at 2-8 °C for longer time at -20°	at 2-8°C, at -20°C	---	---
Hormone	T3 Resin Uptake (T3 RU)	Elisa	PH,PE ,S	0.5	2day	2day	1 day at RT, 7 days at 2-8°C ,1month at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	Avoid freeze / thaw cycles

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S .vol l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Microbiology	Throat Culture for BK	Microb Culture	S	---	Daily	3day	The same time must be analysis	at RT	---	Avoid using antibioti
Hormone	Thyroglobulin	Elisa	S	0.5	8day	8day	1 day at 2-8 °c for longer time at -20 °c	at 2-8 °c, at -20 °c	Hemolysis, Icteric, Lipemic	Fasting is recommended
Hormone	Triiodothyronine (T3)	CLIA,ECL	PH,PE ,S,Pna	0.5	2day	2day	1 day at RT, 7 days at 2-8 °c , 1 month at -20 °c	at 2-8 °c, at -20 °c	Hemolysis, Icteric, Lipemic	Avoid freeze / thaw cycles
Hormone	TSH	CLIA	PH,PE ,S	0.5	2day	2day	5 days at 2-8 °c, 1 months at -20 °c	at 2-8 °c, at -20 °c	Hemolysis, Icteric, Lipemic	---
Immunology	TSH Receptor Ab	Elisa	S	0.5	8day	8day	5 days at 2-8 °c, 1 month at -20 °c	at 2-8 °c, at -20 °c	Hemolysis, Icteric, Lipemic	---
Hormone	Testosterone	CLIA	PH,PE ,S	0.5	Daily	next day	5 days at 2-8 °c, 3 months at -20 °c	at 2-8 °c, at -20 °c	Hemolysis, Icteric, Lipemic	---
Microbiology	Throat Direct Smear	---	Throat Swap	---	2day	2day	24 hrs at RT,	24 hrs at RT	---	---
Microbiology	Throat Culture & Sensitivity	Aerobic Culture	Throat Swab	3 Swabs	8day	8day	Must be tested the same time	at RT	---	---
Hormone	TNF.Alpha	Elisa	S, PE, PH	1	12day	12day	6 months at -20 °c CRITICAL FROZEN	at -20 °c	Gross: Hemolysis , Icteric, Lipemic	Avoid freeze / thaw cycles
Microbiology	Tracheal Culture & Sensitivity	---	Tracheal	---	8day	8day	at RT fast sending	at RT fast sending	---	---

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Microbiology	Tracheal Direct Smear	---	Tracheal	---	2day	2day	at RT fast sending	at RT fast sending	---	---
Microbiology	Throat Direct Smear For BK	---	Throat Swap	---	8day	8day	24 hrs at RT	24 hrs at RT	---	---
Pathology	Tissue	process, sectioning and staining,slide preparation	Tissue	---	7day	7day	Unlimited after fixation,Formalin	Formalin, coatainer RT	---	---
Hematology	Thrombin time	clotting	PC	2	5day	5day	6 hrs (keep at 2-8°c until test it)	at -20°c, at -70°c	---	Serum or plasma must be seperated as soon as possible.
Metabolic disorders	Tyrosine	HPLC	P	1	Daily	2day	2 weeks at -20°c	at -20°c	Hemolysis	Fasting 3-6 hours Avoid freez/ thaw cycles Be separated quickl
Parasitology	Touch	ECL	S	4	14day	14day	CRITICAL FROZEN	at 2-8°c, at -20°c	---	---
Biochemistry	Urea (BUN)	photometric	PH,PE ,S	0.5	Daily	next day	7 days at 2 -25°c 1 year at -20°c	at 2-8°c, at -20°c	Hemolysis, Icteric, Lipemic	Avoid repeated freeze / thaw cycles
Urine Analysis	Urine analysis	Direct smear	U	10	Daily	1 day	The same day must be analysis	at RT	---	---
Biochemistry	Urine Protein	Photometric	U	10	Daily	next day	2 days at RT, 7 Days at 2-8°c, 1month -20°c	---	---	---

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Urine biochemistry	Urine Creatinine (Random)	Photometric	U	3	Daily	next day	2 days at RT, 7 Days at 2-8°C, 1month -20°C	at 2-8°C	---	---
Specific Biochemistry	k-stool	ISE	Stool	0.5	Daily	Same day	7days at 2-8°C, 3month -20°C	at 2-8°C at -20°C	Hemolysis, Icteric, Lipemic	---
Urine biochemistry	Urine K	ISE	U	10	2day	2day	7 days at RT, 7 Days at 2-8°C, 1month -20°C	at 2-8°C	---	---
Urine biochemistry	Urine Uric Acid	Photometric	U,S	10	2day	2day	2 days at RT, 7 Days at 2-8°C, 1 month -20°C	at 2-8°C	---	Avoid repeated freeze / thaw cycles
Urine biochemistry	Urine Na	ISE	U	10	2day	2day	7days at RT, 7 Days at 2-8°C, 1 month -20°C	at 2-8°C	---	Avoid repeated freeze / thaw cycles
Urine biochemistry	Urine Volume 24hrs	photometric	U	10	3day	3day	2 days at RT, 4Days 2-8°C 3 week at -20°C	at 2-8°C	---	---
Biochemistry	Urine Protein Electrophores	Electrophoresis	Urine(24h) بدون نگهدارنده	5	13day	13day	7 days at 2-8 °C	at -20°C	---	---
Urine biochemistry	Urine Epinephrin	HPLC	U	5	10day	10day	7 days at 2-8 °C, 1mounth at -20°C	at 2-8°C, at -20°C	---	Abstain from emotional and mental stress, medication for 3 daya prior sampling 'Protect the light

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample tyPE	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Urine biochemistry	Urine Amylase	photometric	U	10	7day	7day	10 days at 2-8°C, 3 Weeks at -20°C , 2days at RT	at 2-8°C, at -20°C	---	---
Urine biochemistry	Urine Clearance 24hr	---	U	10	2day	2day	2 days at RT, 7 Days at 2-8°C, 1 month -20°C	at 2-8°C, at -20°C	---	---
Urine Biochemistry	Urine Citrate	Enzymatic	U	5	Sat,Tue	3day	1 week at 2-8°C for longer time at -20	at 2-8°C, at -20°C	---	---
Urine biochemistry	Urine Copper 24 hr	Colorimetry	U	1.5	10day	10day	1 week at 2-8°C for longer time at -20°	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Urine Hormone	Urine V.M.A 24 hrs	Colorimetry	U	10	6day	6day	2 weeks at 2-8°C with pH: 2-4	at 2-8°C	---	Avoid using coffe,tea,chcolate,Caca o,banana,...
Metabolic disorders	Urine Reducing Substance	Chemical	U	10	6day	6day	1 day at 2-8°C, 1month at -20°C	---	---	---
Urine biochemistry	Urine Micro Albumin	Imm.Turb	U	5	8day	8day	up to 4 hrs at 18- 25°C, up to 1 week at - 2-8°C, up to 3month at -20°C	at 2-8°C, at -20°C	---	---
Microbiology	Ureaplasma Culture	Microb Culture	BF,Urethral dis.,Vaginal dis.,U	0.5	Daily	8day	The same time must be analysis	at 2-8°C	---	Avoid using antibioti

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Urine Biochemistry	Urine Urea	photometric	U	10	5day	5day	2 days at RT, 7 Days at 2-8°C, 1 month -20°C	at 2-8°C	---	---
Urine Biochemistry	Urine Cystine	TLC	U(R & 24)	5	10day	10day	4 days at 2-8°C Ur.:1month at -20°C	at -20°C	---	The frozen sample
Urine Biochemistry	Urine Oxalate	Enzymatic	U	10	Sat,Tue	3day	1 week at 2-8°C for longer time at -20°	at 2-8°C, at -20°C	---	---
Microbiology	Urine culture & Sensitivity	---	U	10	3day	3day	24 hrs at 4°C	2 hrs at 4°C	---	---
Microbiology	Urine Direct for BK	---	U	10	8day	8day	24 hrs at 4°C	24 hrs at 4°C	---	---
Microbiology	Urethral Discharge Direct	Aerobic	Vaginal dis	---	2day	2day	in the fastest time possible	24 hrs at RT	---	---
Microbiology	Urethral Discharge (C&S)	---	Vaginal dis	-	8day	8day	24 hrs at RT	24 hrs at RT	---	---
Urine Hormone	Urine Norepinephrine	HPLC	PE, U	1,10	10day	10day	7 days at 2-8°C, 1mounth at -20°C	at 2-8°C, at -20°C	---	Abstain from emotional and mental stress, medication for 3 daya prior sampling

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample type	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Hormone	Urine Normetanephine	Elisa	U	5	10day	10day	7 days at 2-8 °c, 1 month at -20 °c	at 2-8 °c, at -20 °c	---	Abstain from emotional and mental stress, medication for 3 days prior sampling
Urine Biochemistry	Urine Metanephine	Elisa	U	5	10day	10day	2 weeks at 2-8 °c	at 2-8 °c	---	Avoid repeated freeze / thaw cycles 'Protect the light
Urine biochemistry	Urine Mg	AAS	U	0.5	5day	5day	7 days at 2-8 °c, 2 months at -20 °c	at 2-8 °c, at -20 °c	---	---
Microbiology	Urine Sediment culture & Sensitivit	---	U	10	3day	3day	24 hrs at 4 °c	2 hrs at 4 °c	---	---
Microbiology	Urine Sediment	---	U	10	2day	2day	24 hrs at 4 °c	2 hrs at 4 °c	---	---
Hormone	Urine Organic Acid	G.C- MS	U	10	21day	21day	7 days at 2-8 °c, 3 months at -20 °c	at 2-8 °c, at -20 °c	---	---
Specific Biochemistry	Vitamin E	HPLC	S	1	7day	7day	2 weeks at -20 °c	at -20 °c	Hemolysis, Icteric	Avoid freeze/ thaw cycles protect the light Be separated in refrigerated centrifuge Fasting 3-6 hours

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Sector	Test	Assay method	Sample tyPE	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Specific Biochemistry	Vitamin B12	ECL,CLIA	pH, S	0.5	7day	7day	2days at 2-8°C, 1months at -20°C	at 2-8°C, at -20°C	Hemolysis,Icteric	Avoid repeated freeze / thaw cycles
Serology	V.D.R.L	Flocculation	S	0.5	5day	5day	7 days at 2-8°C, 1months < -20°C	at 2-8°C, at -20°C	Hemolysis	---
Immunology	VZV Ab (IgG)	Elisa	S	0.5	7day	7day	2 days at 2-8°C, for longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Immunology	VZV Ab (IgM)	Elisa	S	0.5	5day	5day	2 days at 2-8°C, for longer time at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Specific Biochemistry	Vitamin A	HPLC	S	1	9day	9day	2 weeks at -20°C	at -20°C	Hemolysis,Icteric	void freez/ thaw cycles protect the light Be separated in refrigerated centrifuge Fasting 3-6 hours
Therapeutic drug monitoring	Valporate Na (Depakin)	Fluorescence polarization	S	2,10	8day	8day	2 days at 2-8°C for longer time at -20°	at 2-8°C at 20°C	---	---

آزمایشگاه پاتوبیولوژی شهریار



Sector	Test	Assay method	Sample tyPE	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
H.P.L.C	Vitamin D (25 OH)	H.P.L.C	S	0.5	Daily	next day	1 day at RT 7 days at 2-8°C, 3 months at -20°C	at 2-8°C, at -20°C	Hemolysis,icteric	Avoid repeated freeze / thaw cycles
Microbiology	Vaginal Direct Smear	---	Vaginal dis	---	2day	2day	24 hrs at RT	24 hrs at RT	---	---
Microbiology	Vaginal Culture & Sensitivity	---	Vaginal dis	---	8day	8day	24 hrs at RT	24 hrs at RT	---	---
Specific Biochemistry	Vitamin C	Chemical	S (Centrifuge immediately)	0.5	8day	8day	1 hrs at RT, 2 weeks at -20°C (dark place) with preservative(20 mg oxalic acid in 1 ml serum) 2 months at at -20°C.	at -20°C	Hemolysis,Icteric	Avoid freeze/ thaw cycles.Fasting preferred. Abstain using contraceptive drugs. Protect the light Fasting preferred
Immunology	Von Willebrand Factor	Coagulation	PC	3	13day	13day	6 hrs at RT 14day at -20°C	at -20°C at RT	---	---
Hormone	Vitamin B6	Elisa	PE	3	Every 28day one	2next day	3 weeks at 2-8°C for longer time at -20°C (dark place)	2-8°C, -20°C	---	---

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Sector	Test	Assay method	Sample type	S .vol l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Serology	Wright Agglutination Test	Agglutination	S	0.5	3day	3day	7 days at 2-8°C, 3 months at -20°C	at 2-8°C, at -20°C	---	---
Serology	Widal Agglutination test	Agglutination	S	1	3day	3day	7 days at 2-8°C, 3 months at -20°C	at 2-8°C, at -20°C	Hemolysis, Icteric, Lipemic	---
Serology	Wright Agglutination Test(C.F.S)	Agglutination	S, BF, CSF	0.5	3day	3day	7 days at 2-8°C, 3 months at -20°C	at 2-8°C, at -20°C	---	---
Microbiology	Wound Direct Smear	---	Wet Swap	---	2day	2day	24 hrs at RT	24 hrs at RT	---	---
Microbiology	Wound Discharge (C & S)	---	Wet Swap	---	7day	7day	24 hrs at RT	24 hrs at RT	---	---
Microbiology	Wound Discharge (D.S)	---	Wet Swap	---	Daily	next day	24 hrs at RT	24 hrs at RT	---	---
Microbiology	Wound Culture (Mycobacteria BK)	Aerobic & Ana	Wound dis	---	80day	80day	the same time must be tested	24 hrs at RT	---	---
Immunology	WBC Panel	Cytotoxicity	WB(E or H)	10	Even days	2day	12 hrs at 2-8 °C	at 2-8°C	---	---
Molecular diagnosis	Warfarin dose VKORC/CYP2C9	PCR	WB	5	8day	8day	2 days at 2-8°C, 2 months at -20°C	at -20°C	Hemolysis,clotting, frozen,incorrect, anticoagulantI	---

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Sector	Test	Assay method	Sample tyPE	S .vo l.(ml)	زمان انجام	مدت جوابدهی	storage	Transport	reject	others
Molecular	Warfarin Genotyping/Sensitivity	PCR	WB	5	10day	10day	2 days at 2-8°C, 2 months at -20°C	at 2-8°C	Hemolysis, clotting, frozen, incorrect, anticoagulant	---