

SPECIALIZED TESTS

نام تست	روش انجام تست	نوع نمونه	توضیحات
ACE	ELISA /RIA	Serum	Angiotensin Converting Enzyme
Acetaminophen	HPLC	Serum	
ACLA (IgG/ IgM)	ELISA	Serum	Anti Cardiolipin Antibody
ACTH	ECLIA	Plasma	سریعا سانتریفیوژ و فریز شود
ADA	Colorimetry	Fluid, serum	Adenosine deaminase
AFP	ELFA	Serum	Alfa feto protein
Aldolase	colorimetry	Serum	
Aldosterone	ELISA	Serum	
Allergen (Inhalation)	Chromatography	Serum	
Alpha -1 antitrypsin	Neph.	Serum	
AMA	IFA	Serum	Anti mitochondrial Ab
AMH	ECLIA	Serum	Anti mullerian Hormone
Amino Acid Profile	HPLC	Plasma	EDTA
AML1-ETO t(8;21) Qualitative	PCR	Blood/BM	
Ammonia	colorimetry	Plasma	سریعا سرم گیری و فریز شود

نام تست	روش انجام تست	نوع نمونه	توضیحات
ANA	IFA/ELISA	Serum	
ANCA	IFA/ELISA	Serum	P & C ANCA
Androstenedione	ELISA	Serum	
Anti Ach Receptor Ab	ELISA	Serum	Ach Rec Ab
Anti CCP Ab	ELISA	Serum	Anti-Cyclic citrullinated peptide Ab
Anti gliadin Ab (Total,IgA,IgG,)	IFA	Serum	
Antithrombin III	Coagulation	Plasma	لوله سیترات
Anti musk	ELISA	Serum	سریعا سرم گیری و فریز شود
Anti sperm Ab	IFA	Serum	
APCA	IFA	Serum	Anti Parietal cell Ab
APLA (IgM,IgG)	ELISA	Serum	Anti Phospholipid Ab
ASCA (IgG,IgA)	ELISA	Serum	
ASMA	IFA	Serum	Anti smooth muscle Ab
ATA	CMIA	Serum	Anti thyroglobulin antibody
BCR-ABL-P190 (Quanti-Quali)	PCR	Blood EDTA/ BM	

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BCR-ABL-P210 (Quanti- Quali)	PCR	Blood EDTA/ BM	
BCR-APL PML -RARA	PCR	Blood EDTA/ BM	
Bence-Jones protein	Toluene Sulfuric acid	Urine	
B2 Glycoprotein (Total-IgG-IgM)	ELISA	Serum	
Beta fibrinogen	PCR	Blood EDTA	
Beta-2- microglobulin	Neph.	Serum, Urine	
Bk & JC Virus Qualitative	PCR	Blood EDTA/ Urine	
BK Virus Quantitative	PCR	Blood	
Blood porphyrin	Qual.	Whole blood	EDTA
BRAF exon15 (V600)	PCR	Tissue, FFPE, Blood EDTA	
BRAF-RAS	PCR	Tissue/FFPE	
BRCA	PCR	Blood EDTA	Known mutation testing
BRCA1 and BRCA2 sequencing	PCR	Blood EDTA	
Brucella	PCR	Blood EDTA , Tissue, FFPE, Fluid	
Brucella Ab (IgG, IgM)	ELISA	Serum	
C1 inhibitor	Neph.	Serum	
C3	Neph.	Serum	

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C4	Neph.	Serum	
CA 15-3	ELFA	Serum	
CA 19-9	ELFA	Serum	
CA125	ELFA	Serum	
CagA Ab IgA	ELISA	Serum	
Ca (ionized)	ISE	Serum	لوله شیشه ای
Calcitonin	RIA	Serum	
Calculi analysis	Colorimetry		
Calprotectin	ELISA.	Stool	
Calreticulin for MPN	PCR	Blood EDTA	
Carbamazepine	HPLC	Serum	Peak and Trough
CEA	ELFA	Serum	
Cellcept	LC-MS	Serum	
Ceruloplasmin	Nephelometry	Serum	
CH50	RID	Serum	
Chlamydia Ab	ELISA	Serum	

نام تست	روش انجام تست	نوع نمونه	توضیحات
Chlamydia Trachomatis	PCR	Liquid based	
Chloride	Colorimetry	Serum, 24h urine	
Citrate	Enzymatic	Urine	24h urine with 10cc HCL
c-KIT Mutation	PCR	FFPE,Blood EDTA	For TKI treatment in GISTs and AML
CK-MB	Kinetic	Serum	
CMV (IgG, IgM)	ELFA	Serum	
CMV (Quali-Quant)	PCR	Blood EDTA Urogenital, Urine,Swab, Saliva,Fluid, CSF,Tissue, Biopsies	
Coomb's test (Direct)	Qual	Whole blood	EDTA
Coomb's test (Indirect)	Qual	Serum	
Copper	Colorimetry	Serum,urine	24h urine
Cortisol	ELFA/CMIA	Serum,urine	24h urine
Cortisol Free	RIA	Urine	24h urine
C-peptide	ECLIA	Serum	
Cryoglobulin	Qual.	Serum	قبل از سرم گیری ۲ ساعت در دمای ۳۷ درجه گذاشته شود

نام تست	روش انجام تست	نوع نمونه	توضیحات
CSF chemistry	Colorimetry	CSF	
Cyclosporine	LC/MS	Whole blood	Peak & Trough
Cystatin c	Neph.	Serum	
Cystine	LC/MS	Serum, 24h urine, Urine Random	
DHEA SO4	ECLIA	Serum	
DHR (1)	Flow cytometry	CBC	dihydrorhodamine
DHT	ELISA	Serum	
Digoxin	CLIA	Serum	
Di-nitrophenylhydrazine	Qual.	Urine Random	DNPH for MSUD
Double Marker Screening test	ECLIA	Serum	
dsDNA (Total, IgG, IgM)	ELISA/IFA	Serum	
EBV Ab (IgM-IgG)	ELISA	Serum	
EBV Quantitative	PCR	Blood	
EGFR mutation	PCR	FFPE/ Tissue	For Colon Cancer

1- The dihydrorhodamine flowcytometry based assay is the most commonly used diagnostic screening test for CGD.

نام تست	روش انجام تست	نوع نمونه	توضیحات
EGFR panel for lung cancer	PCR	FFPE/ Tissue	For response to TKI therapy in NSCLC
EML-ALK	FISH	FFPE	For response to TKI therapy in NSCLC
EMA (Total,IgG,IgM,IgA)	IFA	Serum	Anti Endomysial Ab
ENA profile (1)	I.B.	Serum	
Erythropoietin	CLIA	Serum	EPO
Estradiol (E2)	ELFA/CMIA	Serum	
Ethosuximide	HPLC	Serum	
Everolimus	LC/MS	Blood EDTA	
Factor V Leiden R506Q	PCR	Blood EDTA	
Factor V Leiden	Coagulation	Plasma	لوله سیترات
Factor VII	PCR	Blood EDTA	
Factor XIII	PCR	Blood EDTA	
Ferric chloride test	Qual	Urine Random	for PKU
Fibrinogen	Qual	Plasma	لوله سیترات

1- ENA profile consists of: nRNP/Sm/SS-A/SS-B/Scl70/J0-1/ CENP-B/dsDNA/ Nucleosomes/Histone/Ribosomal P-Protein/Ro-52

نام تست	روش انجام تست	نوع نمونه	توضیحات
FIT	Chromato-graphic Immunoassey	Stool	Fecal Immuno-chemical Test (FOB)
FK	ECLIA	Whole blood	EDTA/ Tacrolimus
FLT3 ITD/ FLT3 D835	PCR	Blood EDTA	For prognosis and treatment in AML
Folic Acid	ECLIA	Serum	
FSH	CMIA	Serum	
FTA-Abs	IFA	Serum	
GAD	ELISA	Serum	Glutamic Acid Decarboxylase Autoantibodies
Gastrin	ELISA	Serum	
GGT	Kinetic	Serum	Gamma glutamyl transferase
GH	ECLIA/ ELISA	Serum	Growth Hormone
Hams test	Colorimetry	Serum+ Whole blood	2 Whole blood samples 1 Serum sample
Haptoglobin	Neph.	Serum	
HAV Ab (IgM)	ELFA	Serum	
Hb A2	HPLC	Whole blood	EDTA

نام تست	روش انجام تست	نوع نمونه	توضیحات
HbA1C	HPLC	Whole blood	EDTA
HBc Ab (Total,IgM)	ECLIA	Serum	
HBe Ab	ECLIA	Serum	
HBe Ag	ECLIA	Serum	
Hb electrophoresis	HPLC	Whole blood	EDTA
HBs Ag	ELISA/ ECLIA	Serum	
HBs Ab	ECLIA	Serum	
HBV Qualitative	PCR	Serum/ Plasma	
HBV Quantitative	PCR	Serum/ Plasma	
HCV Ab	ELISA/ ECLIA	Serum	
HCV Genotype	PCR	Serum/ Plasma	Genotype1-6
HCV Qualitative	PCR	Serum/ Plasma	
HCV Quantitative	PCR	Serum/ Plasma	
HDV Ab	ELISA	Serum	
HE4 ¹	ECLIA	Serum	Human Epididymis Protein 4

1.For monitoring recurrence or progression of epithelial ovarian cancer

نام تست	روش انجام تست	نوع نمونه	توضیحات
HER2 ER BB2/ Centromere 17	FISH	FFPE	Breast CA.
HFE common mutations (C282Y, H63D,S65C)	PCR	Blood EDTA	some rare variants in exons 2 and 4 for hereditary hemochromatosis
HIV Ag (P24)	ELFA	Serum	
HIV1, 2 Ab (total)	ELFA	Serum	
HLA B-7	Lympho cytotoxicity	Whole blood	لوله هپارینه / EDTA
HLA B-5	Lympho cytotoxicity	Whole blood	لوله هپارینه
HLA B-8	Lympho cytotoxicity	Whole blood	لوله هپارینه
HLA B-27	Lympho cytotoxicity, PCR	Whole blood	لوله هپارینه / EDTA
HLA B-51	Lympho cytotoxicity	Whole blood	لوله هپارینه
HLA-DR	Flow cytometry	Blood EDTA	
Homocysteine	HPLC	Plasma	EDTA
Homogentisic acid	Qual.	Urine	For Alkaptonuria
Homovanillic acid	LC/MS	Urine 24hrs	HVA- ظرف اسیدی
HPV Detection & Genotyping	PCR	Liquid based pap smear, Tissue	32 Genotypes

نام تست	روش انجام تست	نوع نمونه	توضیحات
H.Pylori (IgA,IgM,IgG)	ELISA	Serum	
HSV I,II (IgG, IgM)	ELISA	Serum	
HSV Qualitative	PCR	Blood EDTA, CSF, Conjunctival Swab, nasopharyngeal Swab, Aspirate tissue, lesion	
HTLV I,II	ELISA	Serum	
Hydatid cyst Ab	ELISA	Serum	
5-Hydroxy indole acetic acid	Qual.	Urine Random	5-HIAA
17-Hydroxy progesterone	ELISA	Serum	
IDH1/IDH2	PCR	FFPE	For astrocytoma & glioma
IFA, Skin (Direct & Indirect)	IFA		Immunofluorescence assay, IgG, IgM, IgA, C3
IgA	Neph.	Serum	
IgE	ELFA	Serum	
IGF1	ELISA	Serum	
IgG	Neph.	Serum	

نام تست	روش انجام تست	نوع نمونه	توضیحات
IgG 4	Neph.	Serum	
IgM	Neph.	Serum	
IGRA	ELISA	Serum	Quantiferon TB-Gold
Immuno- electrophoresis	IFE	Serum	
Immunohistochemistry for: Alk Protein, AMACR, Amyloid A, Annexin-I, Beta-catenin, Bcl 2, Bcl 6, BOB1, HER2, ER, PR, Calponin Calcitonin, Calretinin, CEA, CD1a, CD2, CD3, CD4, CD5, CD7, CD8, CD10, CD11c, CD15, CD19, CD20, CD23, CD30, CD31, CD34, CD38, CD43, CD56, CD68, CD79a, CD99, CD138, CDX2, Chromogranin, C-kit (CD117), Cyclin D1, Cytokeratin, Cytokeratin 5/6, Cytokeratin 7, Cytokeratin 20, Cyto HMWCK , Desmin, DOG1, EGFR, EMA,	IHC		

نام تست	روش انجام تست	نوع نمونه	توضیحات
E-Cadherin, GFAP, GCDFP15, HHV8, HMB 45, HSA, Inhibin A, Kappa light chain, Ki 67, Lambda light chain, LCA, LMP, MLH1, MSH2, MSH6, PMS2, Myeloperoxidase, Moc 31, Myogenin, Melan A, MUM1, NSE, OCT2, P16, P 53, P 63, PAX-5, PLAP, PSA , S100, SMA, SMMHC, Synaptophysin, TTF1, Thyroglobulin, TdT, T-beT, Villin, Vimentin, WT1, Zap 70	IHC		
Inhibin B	ELISA	Serum	
Insulin	ECLIA	Serum	
IUI	Gradient	Semen	
JAK2 exon 12	PCR	Blood EDTA	For JAK2 V617F negative myeloproliferative disease
JAK2 V617F Qualitative	PCR	Blood EDTA	

نام تست	روش انجام تست	نوع نمونه	توضیحات
Kala-azar Ab (IgM,IgG)	IFA	Serum	
Kappa & Lambda	CISH	FFPE	
Kappa & Lambda	Flow cytometry	BM/ Blood EDTA	
karyotype		Blood/ Bone Marrow	
KRAS,EGFR,ALK, BRAF	PCR/FISH	Tissue/FFPE	Lung cancer mutation panel
KRAS codons 12, 13 and 61	PCR	Tissue/FFPE	lung cancer
Lactate	Colorimetry	Plasma	
Lamotrigine	HPLC	Serum	
Leishmania	PCR	Tissue/ lesion	
Levetiracetam	LC/MS	Serum	Peak & Trough
LH	CMIA	Serum	
Lipoprotein a	Immuno-turbidimetric	Serum	
Listeria (Total,IgG, IgM)	IFA	Serum	
Lithium	FlamePh.	Serum	
Liver Copper Content/wt.		Liver Core bx	نمونه حداقل 6 mm داخل ظرف درب دار بدون مایع نگهدارنده

نام تست	روش انجام تست	نوع نمونه	توضیحات
LKM Ab	IFA	Serum	Liver-Kidney Microsomal Ab
Lupus anticoagulant	PTT Based	Plasma	سیترا ته
Magnesium	xylidyl Blue	Serum/Urine	24h urine
Maternal AFP	ECLIA	Serum	
Measles (IgM, IgG)	ELISA	Serum	Rubeola
Meta Nephrine	Colorimetry.	Urine	24h urine
Methotrexate	LC/MS	Serum	24hr. 48hr. 72hr.
Methylmalonic Acid	LC/MS	Urine Random	MMA
Microalbumin	Immunoturb.	Urine	24h & random
MLPA	PCR	Blood EDTA	For long deletions & insertions in BRCA1& BRCA2
MPL exon 10 for MPN	PCR	Blood EDTA	
MPN molecular panel	PCR	Blood EDTA	JAK2,V617, MPL exon 10, JAK2 exon 12, Calreticulin
MTHFR C677T and A1298C	PCR	Blood EDTA	
Mumps (IgG, IgM)	ELISA	Serum	

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Mycobacterium Tuberculosis complex	PCR	Tissue, Fluid, CSF, Sputum, biopsies, whole blood	
Mycoplasma (IgM, IgG)	ELISA	Serum	
MYD88	PCR	Blood EDTA/ BM/FFPE	For lymphoplasmacytic-lymphoma
Neonatal metabolic Screening	Mass MS/MS	DBS	EDTA
NMO Ab	IFA	Serum	
Normetanephrine	ELISA	Urine	24h urine with 10cc Hcl
OCB	IEF	Serum/ CSF	Oligo clonal band
Oncotype Dx	PCR	Blood EDTA	For breast cancer
Osmotic fragility test	Qual.	Plasma	هپارینه
Oxalate	Enzymatic	Urine	24h urine with 10cc Hcl
PAI-1	PCR	Blood EDTA	
PDGFRA	PCR	Tissue-FFPE	for GIST
Phenobarbital	HPLC	Serum	
Phenylalanine	HPLC	Plasma	
Phenytoin	HPLC	Serum	Peak & Trough

نام تست	روش انجام تست	نوع نمونه	توضیحات
Porphyrin	Qual.	Stool, urine, whole blood (EDTA)	
Primidone	HPLC	Serum	
Procalcitonin	ELISA	Serum	
Progesterone	ELFA	Serum	
Prolactin	CMIA	Serum	
Prostatic acid phosphatase	Colorimetry	Serum	
Protein C	Coag.	Plasma	سیترا ته
Protein electrophoresis	Elect.	Serum	
Protein S	Coag.	Plasma	سیترا ته
Prothrombin G20210A	PCR	Blood EDTA	
PSA	ELFA/CMIA	Serum	Prostatic Specific Ag
PSA Free	ELFA	Serum	
PTH	ECLIA	Serum	Parathyroid Hormone
Pyrovate kinase	Colorimetry	Whole blood	
Quadruple Screening test	ECLIA/ELISA	Serum	

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RAS panel for colorectal cancer	PCR	Tissue-FFPE	
Reducing agent	Copper Reduction Reaction	Urine	
Renin	ELISA	Serum	
Rubella Ab (IgM,IgG)	ELFA	Serum	
Salicylate	HPLC	Serum	
Semen analysis	HFT-CASA		
Sequential Screening test	ECLIA/ ELISA	Serum	
SHBG	ELISA	Serum	Sex Hormone Binding Globulin
Sirolimus	LC/MS	Whole blood	
SLA	ELISA	Serum	Soluble Liver Ag
Stool H.P	ELISA	stool	
Sucrose hemolysis test	S.Quan.	Plasma	EDTA
Testosterone	ECLIA	Serum	
Testosterone Free	ELISA	Serum	
Tetanus IgG	ELISA	Serum	
Thyroglobulin	ECLIA	Serum	

نام تست	روش انجام تست	نوع نمونه	توضیحات
Thrombosis panel (Hereditary)	PCR	Blood EDTA	Factor V Leiden R506Q, Prothrombin G20210A, MTHFR C 677T and A1298C, PAI-1
TKI Resistance T 315 I	PCR	Blood/BM	
Topiramate	LC/MS	Serum	Peak and trough
Toxoplasma (Total,IgG,IgM)	IFA	Serum	
TPO Ab	CMIA	Serum	
Transferrin	Immunoturb.	Serum	
Tripple Marker Screening test	ECLIA/ ELISA		
tTG Ab (IgA, IgG)	ELISA	Serum	Tissue transglutaminase antibody
Tryptophan	HPLC	Plasma	
Tyrosine	HPLC	Plasma	
Valporic Acid	HPLC	Serum	Peak & trough
Vit B12	ECLIA/CMIA	Serum	
Vit A,C,D3,E	HPLC	Serum	
VMA	Spectrophoto metric	24h urine+ 10cc Hcl	Vanillylmandelic Acid

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VZV Ab (IgM,IgG)	CLIA/ELISA	Serum	Varicella zoster virus
Whole exome sequencing	NGS	Blood	
Zinc	Colorimetry	Serum	