ADx Test Menu

Contents

Immunology, Antibody Assays

Test Code	Test Description	Notes	Method
see insert	Allergen specific IgE to animals, housedust mites, molds, venoms and insects. More info	Quantitative	Fluorescent Immunoassay
see insert	Allergen specific IgE to grass, tree, weed and occupational allergens. More info	Quantitative	Fluorescent Immunoassay
see insert	Precipitins More info	Hypersensitivity pneumonitis	Gel Immuno diffusion
See insert	IgG Antibodies to common allergens		Fluorescent Immunoassay
IGERAB	Anti-FCε Receptor Assay More info	Anti-IgE Receptor, Chronic urticaria assay, anti-CD203c	Flow Cytometry
ABPAP	Allergic Bronchopulmonary Aspergillosis Panel	ABPA Panel, Total IgE, Aspergillus precipitins, IgE and IgG	Gel immuno-diffusion & FIA
ANA	ANA pattern and titer	Anti-nuclear antibody pattern and titer	ELISA
ENADNA	ANA profile		ELISA
SCL70	Anti-Scl 70 antibodies		ELISA
CCP	Anti-cyclic citrullinated peptide antibodies	CCP (anti-cyclic citrullinated peptide)	ELISA
CYNT	ANCA	anti-neutrophil cytoplasmic antibody	FIA
ATG/TPO	Anti-thyroid antibodies		ELISA
MPOAB	Anti-Myeloperoxidase antibodies		ELISA
PR3AB	Anti-Proteinase 3 antibodies		ELISA
DNAC	Anti-ds-DNA antibody		ELISA
ASM	Anti-Sm antibody		ELISA
RNPSM	Anti-RNP/SM antibody		ELISA
SSAB/SSBB	Sjögrens antibody, anti SS A, anti SS B		ELISA
ABETA	Beta 2 glycoprotein I antibody		Send out
IGA	Immunoglobulin A level	IgA level	Nephelometry
LLIGA	Immunoglobulin A, low level	IgA low level	RID
SIGA	Immunoglobulin A, salivary	IgA, salivary	
AIGD	Immunoglobulin D level	IgD level	
IGE	Immunoglobulin E level	IgE level, serum Efavirenz	FIA
IGG	Immunoglobulin G level	IgG level	Nephelometry
IGM	Immunoglobulin M level	IgM level	Nephelometry
IGSUB	Immunoglobulin subclass levels	IgG1, IgG2, IgG3, IgG4, total IgG	
VISC	Serum viscosity antibody		
DIPHT	Diphtheria IgG antibody titer		
HIB	Hemophilus influenza b IgG antibody titer		
HIVS	Human immunodeficiency virus, 1 and 2 antibody	HIV types 1 & 2 aby	Immuno concentration
PNU12	Pneumococcal polysaccharide IgG antibody	12 serotypes	
RFQ	Rheumatoid factor antibody titer		Nephelometry

Immunology, Antibody Assays cont.

Test Code	Test Description	Notes	Method
RUBLA	Rubella IgG antibody titer		ELISA
RUBS	Rubeola IgG antibody titer		ELISA
TET	Tetanus IgG antibody titer		
VARS	Varicella IgG antibody titer		ELISA
MUMS	Mumps IgG antibody titer		ELISA
DIPHT	Fungal antibodies (Histoplasma, Blastomyces, Coccidioides, Aspergillus)		
CRYFS	Cryofibrinogen screen		
CRYFQ	Cryoglobulin analysis, quantitative with identification of proteins		
CRYOS	Cryoglobulin screen (cryocrit)		
CRP	C-reactive protein	CRP	
see chemistry	Tryptase	Mast cell activation	
see chemistry	Eosinophil cationic protein	ECP	
see chemistry	Protein electrophoresis, Hi Res		
see chemistry	Protein electrophoresis, urine		
see complement	C1-inhibitor autoantibody		
see complement	C1q autoantibody		
see complement	C3 nephritic factor autoantibody		
see complement	Circulating Immune complexes	C1q-binding and C3d	

Immunology, Lymphocyte Phenotyping

Test Code	Test Description	Notes	Method
inquire	T cell receptor V beta expression		Flow Cytometry
inquire	T cell receptor, Alpha beta		Flow Cytometry
inquire	T cell receptor, gamma delta		Flow Cytometry
see Immunology, Antibody assays	Anti-FCε Receptor Assay	Anti-IgE Receptor, Chronic urticaria assay	Flow Cytometry
TBSBS	Lymphocyte enumeration panel	CD3/CD4, CD3/CD8, CD19	Flow Cytometry
TBCDC	Lymphocyte enumeration, CDC panel	CD3/CD4, CD3/CD8, CD19, CD16/56	Flow Cytometry
LAVCT	Bronchoalveolar lavage cell counts & differential	BAL	Hemocytometer
LAVTB	Bronchoalveolar lavage lymphocyte immunophenotype	CD3, CD4, CD8, CD19	Flow Cytometry
inquire	CD antigen markers, custom		Flow Cytometry
CD4M	CD4, helper T cells		Flow Cytometry
CD11A	CD11a, LFA-1 alpha chain		Flow Cytometry
11BO	CD11b, iC3b receptor alpha chain	(Mo1, Mac1, CR3) neutrophils	Flow Cytometry
C11CO	CD11c, gp150, 95alpha chain (CR4)		Flow Cytometry
NKMK	Natural killer cell enumeration (CD16/CD56)		Flow Cytometry
CD18O	CD18, beta chain of CD11 family		Flow Cytometry
CD19M	CD19, pan B cells		Flow Cytometry
CD20M	CD20, pan B cells		Flow Cytometry
IFNGR	Interferon gamma receptor on lymphocytes (CD119)		Flow Cytometry
IL12R	Interleukin 12 receptor (IL-12R) expression on lymphocytes		Flow Cytometry
CD40L	CD40 ligand		Flow Cytometry, send out
MEMB	Memory B cells		Flow Cytometry

Immunology, Cytokines

Test Code	Test Description	Notes	Method
inquire	Intracellular cytokines including CD4/IFN , CD4/IL-2, CD4/TNF, CD8/IFN, CD8/IFN, monocyte IL-12		
INFAL	Interferon alpha	Cytokine IF-α	Immunoassay
INFBE	Interferon beta	Cytokine IF-β	Immunoassay
INFGA	Interferon gamma	Cytokine IF-γ	Immunoassay
GMCSF	Granulocyte macrophage colony stimulating factor	Cytokine GM-CSF	Immunoassay
ILONEA	Interleukin 1 alpha	Cytokine IL-1 alpha	Immunoassay
ILONEB	Interleukin 1 beta	Cytokine IL-1 beta	Immunoassay
ILTWO	Interleukin 2	Cytokine IL-2	Immunoassay
IL3	Interleukin 3	Cytokine IL-3	Immunoassay
IL4	Interleukin 4	Cytokine IL-4	Immunoassay
IL5	Interleukin 5	Cytokine IL-5	Immunoassay
ILSIX	Interleukin 6	Cytokine IL-6	Immunoassay
IL8	Interleukin 8	Cytokine IL-8	Immunoassay
IL10	Interleukin 10	Cytokine IL-10	Immunoassay
IL12	Interleukin 12	Cytokine IL-12	Immunoassay
TNFA	Tumor necrosis factor (TNF) alpha	Cytokine TNF alpha	Immunoassay

Immunology, Cell Function Assays

Test Code	Test Description	Notes	Method
see Occupational Health	Beryllium lymphocyte proliferation test & other metals		
LSCAN	Lymphocyte proliferation to candida antigen More info	Candida lymphocyte proliferation	Cell culture
LSCON	Lymphocyte proliferation to ConA mitogen More info	Concanavalin A lymphocyte proliferation test	Cell culture
LSPHA	Lymphocyte proliferation to PHA mitogen More info	Phytohemagglutinin lymphocyte proliferation test	Cell culture
LSPWM	Lymphocyte proliferation to PWM mitogen More info	Pokeweed mitogen lymphocyte transformation	Cell culture
LSTET	Lymphocyte proliferation to tetanus antigen More info	Tetanus lymphocyte proliferation assay	Cell culture
LPAN2	Lymphocyte proliferation to 3 mitogens & 2 antigens plus CDC enumeration panel More info		Cell culture & flow cytometry
WBCAN	Whole blood proliferation to candida antigen	Candida lymphocyte proliferation	Cell culture
WBCON	Whole blood proliferation to ConA mitogen	Concanavalin A lymphocyte proliferation test	Cell culture
WBPHA	Whole blood proliferation to PHA mitogen	Phytohemagglutinin lymphocyte proliferation test	Cell culture
WBPWM	Whole blood proliferation to PWM mitogen	Pokeweed mitogen lymphocyte transformation	Cell culture
WBTET	Whole blood proliferation to tetanus antigen	Tetanus lymphocyte proliferation assay	Cell culture
NKASS	Natural killer cell functional assay		
ADHM	Neutrophil adherence markers: CD11a,b,c and CD18		
BACT1	Neutrophil bactericidal assay (neutrophil killing) More info	Staph aureus or patient sample	
CTX1	Neutrophil chemotaxis More info		Filter migration
DHR	Neutrophil dihydrorhodamine (DHR) for oxidative burst More info		Flow cytometry
NBT	Neutrophil nitroblue tetrazolium dye reduction for oxidative burst More info	NBT dye reduction test, neutrophil	Dye reduction
CHEMIL	Neutrophil opsonophagocytosis		Opsonochemiluminescence
see Occupational Health	Quantiferon tests		

Respiratory Disease, Familial (Genetics)

Test Code	Test Description	Notes	Method
AATQ	Alpha-1-antitrypsin level		Nephelometry
AATP	Alpha-1-antitrypsin phenotype More info		Isoelectric focusing
B2AR	beta 2 adrenergic receptor		PCR

Respiratory Disease, Microbiology

Test Code	Test Description	Notes	Method
BLDC	Blood culture		Culture
FLUID	Sterile fluid culture		Culture
GENTL	Genital culture		Culture
LGC	Legionella culture		Culture
MYCC	Mycoplasma culture		Culture
RESP	Respiratory culture		Culture
STOLC	Stool culture		Culture
THRC	Throat/Nasal culture		Culture
THRS	Throat screen for strep		Culture
TIP	Catheter tip		Culture
URINE	Urine culture		Culture
WDEEP	Deep wound culture		Culture
WSUPR	Superficial wound culture		Culture
GS	Gram stain		
OAP	Ova and parasites		
PINW	Pinworm prep		
FUNGL	Fungal culture		Culture
See Molecular	Chlamydia pneumonia by PCR		PCR
See Molecular	Mycoplasma pneumonia by PCR		PCR
RRSV	Rapid RSV		Culture
STRPA	Rapid Strep		Culture
INFAB	Rapid influenza A/B		Culture
ARV	Adult respiratory FA		send out
See Molecular	B. pertussis by PCR		send out
CDF	C. difficile toxin assay		send out
CHC	Chlamydia pneumoniae culture		send out
CMVC	Rapid CMV culture, urine		send out
CMVR	Rapid CMV culture		send out
See Molecular	EBV by PCR		send out
See Molecular	Enterovirus by PCR		send out
GIA	Giardia Ag		send out
HSPCR	Herpes simplex virus by PCR		send out
PCPDFA	Pneumocystis direct		send out
RHVS	Rapid herpes culture		send out
RPAR	Respiratory viral FA		send out
RVZ	Rapid varicella zoster culture		send out
VRC	Viral culture		send out
VZPCR	Varicella zoster by PCR		send out
PARV	Parvovirus Ab B19 IgG/IgM		send out
19DNA	Parvovirus B19 DNA by PCR		send out
MT	Lyme disease Ab		send out

Respiratory Disease, Microbiology cont.

Test Code	Test Description	Notes	Method
AMPGM	Mycoplasma pneumoniae Ab		send out
AEBVP	EBV Ab panel		send out
see Immunology, Antibody assays	Diphtheria IgG antibody titer		
see Immunology, Antibody assays	Hemophilus influenza b IgG antibody titer		
see Immunology, Antibody assays	Human immunodeficiency virus, 1 and 2 antibody titers	HIV types 1 & 2 aby titer	
see Immunology, Antibody assays	Pneumococcal polysaccharide IgG antibody	12 serotypes	
see Immunology, Antibody assays	Rubella IgG antibody titer		
see Immunology, Antibody assays	Rubeola IgG antibody titer		
see Immunology, Antibody assays	Tetanus IgG antibody titer		
see Immunology, Antibody assays	Varicella IgG antibody titer		
see Immunology, Antibody assays	Mumps IgG antibody titer		
see Immunology, Antibody assays	Fungal antibodies (Histoplasma, Blastomyces, Coccidioides, Aspergillus)		

Respiratory Disease, Mycobacteriology

Test Code	Test Description	Notes	Method
CULI	1a. Mycobacteria isolation, conventional, AFB smear + rapid Bactec		Culture
CQUAN	1b. Mycobacteria isolation, quantitation on agar plate + rapid Bactec		Culture
inquire	1c. Environmental sample by conventional method + rapid Bactec isolation		
MTD	2a. Mycobact identification, M. tuberculosis only, nucleic acid amplif from raw specimen		GenProbe amplif
HPLC1+HPLC2	2b. Mycobact identification, species, test panel		HPLC, 16s DNA sequencing, biochemical
GENI	2c. Mycobact identification, M. avium and M. intracellulare, nucleic acid amplif		GenProbe amplif
SUN	3a. Mycobact susceptibility, 10 drugs, agar proportion test		
SUN2	3b. Mycobact susceptibility, 6 drugs, agar proportion test		
SUN3	3c. Mycobact susceptibility, 4 drugs, agar proportion test		
TBRAPD	3d. Mycobact susceptibility, 4 drugs, rapid Bactec M. tuberculosis only		
UPYR	3e. Mycobact susceptibility, pyrazinamide (PZA), rapid Bactec M. tuberculosis only		
inquire	3f. Mycobact susceptibility, radiometric MIC any single drug		
MAC8C	3g. Mycobact susceptibility, MIC of 8 drugs + combination, for M avium complex		
MAC12C	3h. Mycobact susceptibility, MIC of 12 drugs + combination, for M avium complex		
RGM	3i. Mycobact susceptibility, MIC of 15 drugs, for rapidly growing Mycobacteria		
VET19	3j. Mycobact and Actinobacter susceptibility, MIC of 20 drugs, non-Human patients only		

Complement Assays

Test Code	Test Description	Notes	Method
AH50	AH50		hemolytic assay
CH50	CH50		hemolytic assay
CEIQ	C1-INH level	Hereditary & acquired angioedema	ELISA
C1Q	C1q level		RID
C1RL	C1r level		RID
C1SL	C1s level		RID
C2L	C2 level		RID
C3	C3 level		Nephelometry
C4	C4 level		Nephelometry
C5L	C5 level		RID
C6L	C6 level		RID
C7L	C7 level		RID
C8L	C8 level		RID
C9L	C9 level		RID
FBL	Factor B level	C3PA	RID
FH	Factor H level		RID
FIL	Factor I level	KAF	RID
PROP	Properdin level		ELISA
MLEC	Mannose binding lectin level		ELISA
CIC	Circulating Immune complexes	C1q-binding and C3d	
C1F	C1 function		Hemolytic assay
CEIF	C1-INH function		ELISA
C1QH	C1q function		Hemolytic assay
C2F	C2 function		Hemolytic assay
C3F	C3 function		Hemolytic assay
C4F	C4 function		Hemolytic assay
C5F	C5 function		Hemolytic assay
C6F	C6 function		Hemolytic assay
C7F	C7 function		Hemolytic assay
C8F	C8 function		Hemolytic assay
C9F	C9 function		Hemolytic assay
PFBF	Factor B function		Hemolytic assay
FDF	Factor D function		Hemolytic assay
C59S	Rapid screen for deficiency of C5-C9 late components	C5 - C9 and CH50	
C4RAT	Ratio of C4d to C4		
BBL	Bb level		
C3AL	C3a des Arg level		RIA
C4AL	C4a des Arg level		RIA
C5AL	C5a des Arg level	Complement derived chemotactic factor	RIA

Complement Assays cont.

Test Code	Test Description	Notes	Method
IC3B	iC3b level		ELISA
SC5B9	SC5b-9 level		ELISA
C4D	C4d level		ELISA
CEIAP	C1-inhibitor autoantibody		ELISA
C1QAB	C1q autoantibody More info		ELISA
C3NEF	C3 nephritic factor autoantibody More info		2-D Immuno-electrophoresis

Drug Pharmacokinetics & Pharmacogenomics

Test Code	Test Description	Notes	Method
Inquire	LTE4 quantification		Mass spec
GCLS	Glucocorticoid lymphocyte stimulation	Steroid resistance assay	Cell culture
CORTH	Cortisol measurements pharmacokinetics		HPLC
AMPL	Amprenavir	(2-3 hour & trough)	HPLC
ATAZ	Atazanavir	(2 hour & trough)	HPLC
AZL	Azithromycin	(2-3 h)	HPLC
CMH	Capreomycin	(2 h)	HPLC
CIPH	Ciprofloxacin	(2 h)	HPLC
CLART	Clarithromycin	(2-3 h)	HPLC
CFH	Clofazimine	(2-3 h)	HPLC
CSH	Cycloserine	(2-3 h)	HPLC
DARU	Darunavir		HPLC
DELV	Delavirdine	(1-2 h & trough)	HPLC
EFVL	Efavirenz	(5 h & trough)	HPLC
EMBH	Ethambutol	(2-3 h)	HPLC
ETAH	Ethionamide	(2 h)	HPLC
FLUCZ	Fluconazole	(2 h)	HPLC
GTFHL	Gatifloxacin	(2 h)	HPLC
INDL	Indinavir	(1-2 h & trough)	HPLC
INH	Isoniazid	(1-2 h)	HPLC
ITRL	Itraconazole	(3-4 h)	HPLC
LFLHL	Levofloxacin	(2 h)	HPLC
LNZL	Linezolid	(2 h & trough)	HPLC
LOOPV	Lopinavir	(4-6 h & trough)	HPLC
MXFL	Moxifloxacin	(2 h)	HPLC
NLFL	Nelfinavir	(2-3 h & trough)	HPLC
NEV	Nevirapine	(2 h & trough)	HPLC
OFLHL	Ofloxacin	(2 h)	HPLC
PASH	p-Aminosalicylic acid	(6 h)	HPLC
POSA	Posaconazole		HPLC
PZAH	Pyrazinamide	(2 h)	HPLC
RBN	Rifabutin	(3 h)	HPLC
RIFH	Rifampin	(2 h)	HPLC
RFPTN	Rifapentine	(5 h)	HPLC
RTVL	Ritonavir	(2-3 h & trough)	HPLC
SAQL	Saquinavir	(2-3 h & trough)	HPLC
SMH	Streptomycin	(2 h)	HPLC
TIPV	Tipranavir		HPLC
VORL	Voriconazole	(2 h)	HPLC

Occupational Medicine & Employee Health

Test Code	Test Description	Notes	Method
QTB	Quantiferon Gold		
Inquire	Quantiferon In Tube		
BER I	Beryllium lymphocyte proliferation test	BeLPT, Lymphocyte proliferation to beryllium	Cell culture
BEBAL	Beryllium lymphocyte proliferation test, BAL	BeLPT, Lymphocyte proliferation to beryllium	Cell culture
METLT	Lymphocyte proliferation to metals		Cell culture

Molecular Diagnostics

Test Code	Test Description	Notes	Method
WARPGX	Warfarin pharmacogenetic test		PCR
TAMPGX	Tamoxifen pharmacogenetic test		PCR
CHLU	Chlamydia pneumonia by PCR		PCR
MYPCR	Mycoplasma pneumonia by PCR		PCR
B2AR	beta 2 adrenergic receptor		PCR
C2TYI	Complement C2 genotype		PCR
Inquire	Factor B genotype		PCR
BPPCR	B. pertussis by PCR		PCR
MT	EBV by PCR		PCR
ENPCR	Enterovirus by PCR		PCR
HSPCR	Herpes simplex virus by PCR		PCR
VZPCR	Varicella zoster by PCR		PCR
19DNA	Parvovirus B19 DNA by PCR		send out

Chemistry & Hematology

Test Code	Test Description	Notes	Method
BMPX	Basic metabolic panel		
CMPX	Comprehensive metabolic panel		
HFPX	Hepatic function panel		
LIPANX	Lipid panel		
ELPLX	Electrolyte panel		
RNFPX	Renal function panel		
ALBX	Albumin		
ALKX	Alkaline phosphatase		
AAMYL	Amylase		
ASTX	Aspartate transaminase		
BUNX	Urea nitrogen		
CAX	Calcium		
CO2X	Carbon dioxide		
CLX	Chloride		
CHOLX	Cholesterol		
CPKX	Creatine phosphokinase		
NJCKMB	CPKMB quantitation		
CRETX	Creatinine		
DBILIX	Direct bilirubin		
FEX	Iron		
FEIBX	Iron & iron binding		
AFERRI	Ferritin		
GGTX	Gamma glutamyl transferase		
GLUCX	Glucose, random		
GLUFX	Glucose, fasting		
HDLCX	HDL cholesterol		
HBA1CX	Hemoglobin A1C		
LDHX	Lactate dehydrogenase		
MGX	Magnesium		
PHOSX	Phosphorus		
KX	Potassium		
NAX	Sodium		
TBILIX	Total bilirubin		
ATHYX	Thyroxine (T4)		Send out
ATSH	Thyroid stimulating hormone		Send out
AFET4	Free thyroxine (free T4)		Send out
TPX	Total protein		
TRIGX	Triglycerides		
NJTROP	Troponin		
ATUPT	T3-Uptake		
URICX	Uric acid		

Chemistry & Hematology cont.

Test Code	Test Description	Notes	Method
APTT	Activated partial thromboplastin time, coagulation		
NJDIME	D-dimer, coagulation		
APROTC	Protein C activity, coagulation		Send out
APROTS	Protein S activity, coagulation		Send out
PTIME	Prothrombin time, coagulation		
ARVV	Dilute russell viper venom time, coagulation		Send out
PELE	Protein electrophoresis, Hi Res		Agarose electro-phoresis
UPELE	Urine protein electrophoresis		Agarose electro-phoresis
AUA	Urinalysis		
MT	Urine 5-hydroxyindoleacetic acid		send out
UHCG	Urine beta hCG		
UCAX	Urine calcium		
UCLX	Urine chloride		
UCREAX	Urine creatinine		
UDRGS	Urine drug abuse screen		
MT	Urine metanephrines		send out
MT	Urine N-Telopeptide (NTX)		send out
UKX	Urine potassium		
UPHOX	Urine phosphorus		
UNAX	Urine sodium		
MTPX	Urine total protein		
UUNX	Urine urea nitrogen		
UURCX	Urine uric acid		
MT	Urine vanillylmandelic acid		send out
CGLUX	CSF glucose		Send out
CTPX	CSF protein		Send out
AAGCE	Angiotensin converting enzyme		Send out
AALDO	Aldolase		Send out
AALST	Aldosterone		Send out
BHCG	Beta hCG, qualitative serum		
BHCGQ	Beta hCG, quantitative, serum		Send out
PCAT	Plasma catecholamines		Send out
APROSA	Prostatic specific Ag		Send out
SWT	Sweat test		Send out
TES	Testosterone		Send out
AVITA	Vitamin A		Send out
AVTB12	Vitamin B12		Send out
ACLTR	Vitamin D, 1, 25-Dihydroxy		Send out
AVD25	Vitamin D, 25-Hydroxy		Send out

Chemistry & Hematology cont.

Test Code	Test Description	Notes	Method
AVITE	Vitamin E		Send out
CAR	Carbamazepine (Tegretol) TDM		Send out
ADIG	Digoxin (Lanoxin) TDM		Send out
PHNY	Phenytoin (Dilantin) TDM		Send out
GENT	Gentamicin (Garamycin) TDM		Send out
NOR	Nortryptiline (Aventyl, Pamelor) TDM		Send out
THEO	Theophylline TDM		Send out
ATOBR	Tobramycin TDM		Send out
AVALPA	Valproic acid (Depacote, Depakene) TDM		Send out
AVANC	Vancomycin TDM		Send out
see Immunology, Antibody assays	Sjögrens antibody, anti SS A, anti SS B		
see Immunology, Antibody assays	Beta 2 glycoprotein I antibody		Send out
ATRYPS	Tryptase	Mast cell activation	send out
ECP	Eosinophil cationic protein	ECP	
PELE	Protein electrophoresis, Hi Res		
PELE	Protein electrophoresis, urine		
HCBC	CBC with automated diff		
CEOS	Circulating eosinophils		
ESR	Erythrocyte sedimentation rate		Send out
ARETIC	Reticulocytes		
SNAS	Nasal eosinophils		
SSPU	Sputum eosinophils		
CSFCT	CSF cell count		
BFC	Body fluid cell count		
SLEUK	Fecal leukocytes		
SBLD	Occult blood		

ADx Test Menu

Alphabetical Order

A B C D E F G H I J K L M

N O P Q R S T U V W X Y Z

ADx Alphabetized Test Menu

Test Code	Test Description	Notes	Method
APTT	Activated partial thromboplastin time, coagulation		
ARV	Adult respiratory FA		send out
AH50	AH50		hemolytic assay
ALBX	Albumin		
AALDO	Aldolase		send out
AALST	Aldosterone		send out
ALKX	Alkaline phosphatase		
see insert	Allergen specific IgE animals, housedust mites, molds, venoms and insects	Quantitative	Fluorescent Immunoassay
see insert	Allergen specific IgE to grass, tree, weed and occupational allergens	Quantitative	Fluorescent Immunoassay
see insert	IgG antibodies to common allergens	Hypersensitivity pneumonitis	Fluorescent Immunoassay
ABPAP	Allergic Bronchopulmonary Aspergillosis Panel	ABPA Panel, Total IgE, Aspergillus precipitins, IgE and IgG	Gel Immunodiffusion & FIA
AATQ	Alpha-1-antitrypsin level		Nephelometry
AATP	Alpha-1-antitrypsin phenotype		Isoelectric focusing
AMPL	Amprenavir	(2-3 hour & trough)	HPLC
AAMYL	Amylase		
ANA	ANA pattern and titer	Anti-nuclear antibody pattern and titer	ELISA
ENADNA	ANA profile		ELISA
CYNT	ANCA	anti-neutrophil cytoplasmic antibody	IFA
AAGCE	Angiotensin converting enzyme		send out
see individual	Antibody levels		
CCP	Anti-cyclic citrullinated peptide antibodies	CCP (anti-cyclic citrullinated peptide)	ELISA
DNAC	Anti-ds-DNA antibody		ELISA
IGERAB	Anti-FCε Receptor Assay	Anti-IgE Receptor, Chronic urticaria assay, anti-CD203c	Flow Cytometry
MPOAB	Anti-Myeloperoxidase antibodies		ELISA
PR3AB	Anti-Proteinase 3 antibodies		ELISA
RNPSM	Anti-RNP/SM antibody		ELISA
SCL70	Anti-Scl 70 antibodies		ELISA
ASM	Anti-Sm antibody		ELISA
ATG/TPO	Anti-thyroid antibodies		ELISA
ASTX	Aspartate transaminase		
ATAZ	Atazanavir	(2 hour & trough)	HPLC
AZL	Azithromycin	(2-3 h)	HPLC

ADx Alphabetized Test Menu cont.

Test Code	Test Description	Notes	Method
BPPCR	B. pertussis by PCR		PCR
BMPX	Basic metabolic panel		
BBL	Bb level		
BER1	Beryllium lymphocyte proliferation test	BeLPT, Lymphocyte proliferation to beryllium	Cell culture
BEBAL	Beryllium lymphocyte proliferation test, BAL	BeLPT, Lymphocyte proliferation to beryllium	Cell culture
B2AR	beta 2 adrenergic receptor		PCR
ABETA	Beta 2 glycoprotein 1 antibody		send out
BHCG	Beta hCG, qualitative serum		
BHCGQ	Beta hCG, quantitative, serum		send out
BLDC	Blood culture		Culture
BFC	Body fluid cell count		
LAVCT	Bronchoalveolar lavage cell counts & differential	BAL	Hemocytometer
LAVTB	Bronchoalveolar lavage lymphocyte immunophenotype	CD3, CD4, CD8, CD19	Flow Cytometry
CDF	C. difficile toxin assay		send out
C1F	C1 function		Hemolytic assay
CEIF	C1-INH function		ELISA
CEIQ	C1-INH level	Hereditary & acquired angioedema	ELISA
CEIAP	C1-inhibitor autoantibody		ELISA
C1QAB	C1q autoantibody		ELISA
C1QH	C1q function		Hemolytic assay
C1Q	C1q level		RID
C1RL	C1r level		RID
C1SL	C1s level		RID
C2F	C2 function		Hemolytic assay
C2L	C2 level		RID
C3F	C3 function		Hemolytic assay
C3	C3 level		Nephelometry
C3NEF	C3 nephritic factor autoantibody		2-D Immuno-electrophoresis
C3AL	C3a des Arg level		RIA
C4F	C4 function		Hemolytic assay
C4	C4 level		Nephelometry
C4AL	C4a des Arg level		RIA
C4D	C4d level		ELISA
C5F	C5 function		Hemolytic assay
C5L	C5 level		RID

ADx Alphabetized Test Menu cont.

Test Code	Test Description	Notes	Method
C5AL	C5a des Arg level	Complement derived chemotactic factor	RIA
C6F	C6 function		Hemolytic assay
C6L	C6 level		RID
C7F	C7 function		Hemolytic assay
C7L	C7 level		RID
C8F	C8 function		Hemolytic assay
C8L	C8 level		RID
C9F	C9 function		Hemolytic assay
C9L	C9 level		RID
CAX	Calcium		
CMH	Capreomycin	(2 h)	HPLC
CAR	Carbamazepine (Tegretol) TDM		send out
CO2X	Carbon dioxide		
TIP	Catheter tip		Culture
HCBC	CBC with automated diff		
inquire	CD antigen markers, custom		Flow Cytometry
CD11A	CD11a, LFA-1 alpha chain		Flow Cytometry
11BO	CD11b, iC3b receptor alpha chain	(Mo1, Mac1, CR3) neutrophils	Flow Cytometry
C11CO	CD11c, gp150, 95alpha chain (CR4)		Flow Cytometry
CD18O	CD18, beta chain of CD11 family		Flow Cytometry
CD19M	CD19, pan B cells		Flow Cytometry
CD20M	CD20, pan B cells		Flow Cytometry
CD4M	CD4, helper T cells		Flow Cytometry
CD40L	CD40 ligand		Flow Cytometry, send out
CH50	CH50		hemolytic assay
CHLU	Chlamydia pneumonia by PCR		PCR
CHC	Chlamydia pneumoniae culture		send out
CLX	Chloride		
CHOLX	Cholesterol		
CIPH	Ciprofloxacin	(2 h)	HPLC
CEOS	Circulating eosinophils		
CIC	Circulating Immune complexes	C1q-binding and C3d	
CLART	Clarithromycin	(2-3 h)	HPLC
CFH	Clofazimine	(2-3 h)	HPLC
C2TYI	Complement C2 genotype		PCR
CMPX	Comprehensive metabolic panel		
CORTH	Cortisol measurements		HPLC

ADx Alphabetized Test Menu cont.

Test Code	Test Description	Notes	Method
NJCKMB	CPKMB quantitation		
CRP	C-reactive protein	CRP	
CPKX	Creatine phosphokinase		
CRETX	Creatinine		
CRYFS	Cryofibrinogen screen		
CRYFQ	Cryoglobulin analysis, quantitative with identification of proteins		
CRYOS	Cryoglobulin screen (cryocrit)		
CSFCT	CSF cell count		
CGLUX	CSF glucose		send out
CTPX	CSF protein		send out
CSH	Cycloserine	(2-3 h)	HPLC
DARU	Darunavir		HPLC
NJDIME	D-dimer, coagulation		
WDEEP	Deep wound culture		Culture
DELV	Delavirdine	(1-2 h & trough)	HPLC
ADIG	Digoxin (Lanoxin) TDM		send out
ARVV	Dilute russell viper venom time, coagulation		send out
DIPHT	Diphtheria IgG antibody titer		
DBILIX	Direct bilirubin		
AEBVP	EBV Ab panel		send out
MT	EBV by PCR		PCR
EFVL	Efavirenz	(5 h & trough)	HPLC
ELPLX	Electrolyte panel		
ENPCR	Enterovirus by PCR		PCR
ECP	Eosinophil cationic protein	ECP	
ESR	Erythrocyte sedimentation rate		send out
EMBH	Ethambutol	(2-3 h)	HPLC
ETAH	Ethionamide	(2 h)	HPLC
PFBF	Factor B function		Hemolytic assay
Inquire	Factor B genotype		PCR
FBL	Factor B level	C3PA	RID
FDF	Factor D function		Hemolytic assay
FH	Factor H level		RID
FIL	Factor I level	KAF	RID
SLEUK	Fecal leukocytes		
AFERRI	Ferritin		
FLUCZ	Fluconazole	(2 h)	HPLC
AFET4	Free thyroxine (free T4)		send out

ADx Alphabetized Test Menu cont.

Test Code	Test Description	Notes	Method
DIPHT	Fungal antibodies	Histoplasma, Blastomyces, Coccidioides, Aspergillus	
FUNGL	Fungal culture		Culture
GGTX	Gamma glutamyl transferase		
GTFHL	Gatifloxacin	(2 h)	HPLC
GENTL	Genital culture		Culture
GENT	Gentamicin (Garamycin) TDM		send out
GIA	Giardia Ag		send out
GCLS	Glucocorticoid lymphocyte stimulation	Steroid resistance assay	Cell culture
GLUFX	Glucose, fasting		
GLUCX	Glucose, random		
GS	Gram stain		
GMCSF	Granulocyte macrophage colony stimulating factor	Cytokine GM-CSF	Immunoassay
HDLCX	HDL cholesterol		
HBA1CX	Hemoglobin A1C		
HIB	Hemophilus influenza b IgG antibody titer		
HFPX	Hepatic function panel		
HSPCR	Herpes simplex virus by PCR		PCR
HIVS	Human immunodeficiency virus, 1 and 2 antibody	HIV types 1 & 2 aby	Immuno concentration
IC3B	iC3b level		ELISA
IGA	Immunoglobulin A level	IgA level	Nephelometry
LLIGA	Immunoglobulin A, low level	IgA low level	RID
SIGA	Immunoglobulin A, salivary	IgA, salivary	
AIGD	Immunoglobulin D level	IgD level	
IGE	Immunoglobulin E level	IgE level, serum Efavirenz	FIA
IGG	Immunoglobulin G level	IgG level	Nephelometry
IGM	Immunoglobulin M level	IgM level	Nephelometry
IGSUB	Immunoglobulin subclass levels	IgG1, IgG2, IgG3, IgG4, total IgG	
INDL	Indinavir	(1-2 h & trough)	HPLC
INFAL	Interferon alpha	Cytokine IF-a	Immunoassay
INFBE	Interferon beta	Cytokine IF-b	Immunoassay
INFGA	Interferon gamma	Cytokine IF-g	Immunoassay
IFNGR	Interferon gamma receptor on lymphocytes (CD119)		Flow Cytometry
ILONEA	Interleukin 1 alpha	Cytokine IL-1 alpha	Immunoassay
ILONEB	Interleukin 1 beta	Cytokine IL-1 beta	Immunoassay
IL10	Interleukin 10	Cytokine IL-10	Immunoassay
IL12	Interleukin 12	Cytokine IL-12	Immunoassay

ADx Alphabetized Test Menu cont.

Test Code	Test Description	Notes	Method
IL12R	Interleukin 12 receptor (IL-12R) expression on lymphocytes		Flow Cytometry
ILTWO	Interleukin 2	Cytokine IL-2	Immunoassay
IL3	Interleukin 3	Cytokine IL-3	Immunoassay
IL4	Interleukin 4	Cytokine IL-4	Immunoassay
IL5	Interleukin 5	Cytokine IL-5	Immunoassay
ILSIX	Interleukin 6	Cytokine IL-6	Immunoassay
IL8	Interleukin 8	Cytokine IL-8	Immunoassay
inquire	Intracellular cytokines including CD4/IFN , CD4/ IL-2, CD4/TNF, CD8/IFN, CD8/IFN, monocyte IL-12		
FEX	Iron		
FEIBX	Iron & iron binding		
INH	Isoniazid	(1-2 h)	HPLC
ITRL	Itraconazole	(3-4 h)	HPLC
LDHX	Lactate dehydrogenase		
LGC	Legionella culture		Culture
LFLHL	Levofloxacin	(2 h)	HPLC
LNZL	Linezolid	(2 h & trough)	HPLC
LIPANX	Lipid panel		
LOOPV	Lopinavir	(4-6 h & trough)	HPLC
Inquire	LTE4		Mass spec
MT	Lyme disease Ab		send out
TBSBS	Lymphocyte enumeration panel	CD3/CD4, CD3/CD8, CD19	Flow Cytometry
TBCDC	Lymphocyte enumeration, CDC panel	CD3/CD4, CD3/CD8, CD19, CD16/56	Flow Cytometry
LPAN2	Lymphocyte proliferation to 3 mitogens & 2 antigens plus CDC enumeration panel		Cell culture & flow cytometry
LSCAN	Lymphocyte proliferation to candida antigen	Candida lymphocyte proliferation	Cell culture
LSCON	Lymphocyte proliferation to ConA mitogen	Concanavalin A lymphocyte proliferation test	Cell culture
METLT	Lymphocyte proliferation to metals		Cell culture
LSPHA	Lymphocyte proliferation to PHA mitogen	Phytohemagglutinin lymphocyte proliferation test	Cell culture
LSPWM	Lymphocyte proliferation to PWM mitogen	Pokeweed mitogen lymphocyte transformation	Cell culture
LSTET	Lymphocyte proliferation to tetanus antigen	Tetanus lymphocyte proliferation assay	Cell culture
MGX	Magnesium		
MLEC	Mannose binding lectin level		ELISA

ADx Alphabetized Test Menu cont.

Test Code	Test Description	Notes	Method
MEMB	Memory B cells		Flow Cytometry
MXFL	Moxifloxacin	(2 h)	HPLC
MUMS	Mumps IgG antibody titer		ELISA
MIC21	Mycobact and Actinobacter susceptibility, MIC of 20 drugs, for rapid growers		
VET19	Mycobact and Actinobacter susceptibility, MIC of 20 drugs, non-Human patients only		
GENI	Mycobact identification, M. avium and M. intracellulare, nucleic acid amplif		GenProbe amplif
MTD	Mycobact identification, M. tuberculosis only, nucleic acid amplif from raw specimen		GenProbe amplif
HPLC1+HPLC2	Mycobact identification, species, test panel		HPLC, 16s DNA sequencing, biochemical
SUN	Mycobact susceptibility, 10 drugs, agar proportion test		
SUN3	Mycobact susceptibility, 4 drugs, agar proportion test		
TBRAPD	Mycobact susceptibility, 4 drugs, rapid Bactec M. tuberculosis only		
SUN2	Mycobact susceptibility, 6 drugs, agar proportion test		
MAC12C	Mycobact susceptibility, MIC of 12 drugs + combination, for M avium complex		
RGM	Mycobact susceptibility, MIC of 15 drugs, for rapidly growing Mycobacteria		
MAC8C	Mycobact susceptibility, MIC of 8 drugs + combination, for M avium complex		
UPYR	Mycobact susceptibility, pyrazinamide (PZA), rapid Bactec M. tuberculosis only		
inquire	Mycobact susceptibility, radiometric MIC any single drug		
CULI	Mycobacteria isolation, conventional, AFB smear + rapid Bactec		Culture
CQUAN	Mycobacteria isolation, quantitation on agar plate + rapid Bactec		Culture
MYCC	Mycoplasma culture		Culture
MYPCR	Mycoplasma pneumonia by PCR		PCR
AMPGM	Mycoplasma pneumoniae Ab		send out
SNAS	Nasal eosinophils		
NKMK	Natural killer cell enumeration (CD16/CD56)		Flow Cytometry
NKASS	Natural killer cell functional assay		
NLFL	Nelfinavir	(2-3 h & trough)	HPLC

ADx Alphabetized Test Menu cont.

Test Code	Test Description	Notes	Method
ADHM	Neutrophil adherence markers: CD11a,b,c and CD18		
BACT1	Neutrophil bactericidal assay (neutrophil killing)	Staph aureus or patient sample	
CTX1	Neutrophil chemotaxis		Filter migration
DHR	Neutrophil dihydrorhodamine (DHR) for oxidative burst		Flow cytometry
NBT	Neutrophil nitroblue tetrazolium dye reduction for oxidative burst	NBT dye reduction test, neutrophil	Dye reduction
CHEMIL	Neutrophil opsonophagocytosis	Opsonochemiluminescence	
NEV	Nevirapine	(2 h & trough)	HPLC
NOCD	Nocardia and Actinobacter susceptibility (non Mycobacter), MIC of 15 drugs		
NOR	Nortryptiline (Aventyl, Pamelor) TDM		send out
SBLD	Occult blood		
OFLHL	Ofloxacin	(2 h)	HPLC
OAP	Ova and parasites		
PASH	p-Aminosalicylic acid	(6 h)	HPLC
PARV	Parvovirus Ab B19 IgG/IgM		send out
19DNA	Parvovirus B19 DNA by PCR		send out
PHNY	Phenytoin (Dilantin) TDM		send out
PHOSX	Phosphorus		
PINW	Pinworm prep		
PCAT	Plasma catecholamines		send out
PNU12	Pneumococcal polysaccharide IgG antibody	12 serotypes	
PCPDFA	Pneumocystis direct		send out
POSA	Posaconazole		HPLC
KX	Potassium		
see insert	Precipitins		Gel Immunodiffusion
PROP	Properdin level		ELISA
APROSA	Prostatic specific Ag		send out
APROTC	Protein C activity, coagulation		send out
PELE	Protein electrophoresis, Hi Res		
PELE	Protein electrophoresis, urine		
APROTS	Protein S activity, coagulation		send out
PTIME	Prothrombin time, coagulation		
PZAH	Pyrazinamide	(2 h)	HPLC
QTB	Quantiferon Gold		
Inquire	Quantiferon In Tube		
CMVR	Rapid CMV culture		send out

ADx Alphabetized Test Menu cont.

Test Code	Test Description	Notes	Method
CMVC	Rapid CMV culture, urine		send out
RHVS	Rapid herpes culture		send out
INFAB	Rapid influenza A/B		Culture
RRSV	Rapid RSV		Culture
C59S	Rapid screen for deficiency of C5-C9 late components	C5 - C9 and CH50	
STRPA	Rapid Strep		Culture
RVZ	Rapid varicella zoster culture		send out
C4RAT	Ratio of C4d to C4		
RNFPX	Renal function panel		
RESP	Respiratory culture		Culture
RPAR	Respiratory viral FA		send out
ARETIC	Reticulocytes		
RFQ	Rheumatoid factor antibody titer		Nephelometry
RBN	Rifabutin	(3 h)	HPLC
RIFH	Rifampin	(2 h)	HPLC
RFPTN	Rifapentine	(5 h)	HPLC
RTVL	Ritonavir	(2-3 h & trough)	HPLC
RUBLA	Rubella IgG antibody titer		ELISA
RUBS	Rubeola IgG antibody titer		ELISA
SAQL	Saquinavir	(2-3 h & trough)	HPLC
SC5B9	SC5b-9 level		ELISA
VISC	Serum viscosity antibody		
SSAB/SSBB	Sjögrens antibody, anti SS A, anti SS B		ELISA
NAX	Sodium		
SSPU	Sputum eosinophils		
FLUID	Sterile fluid culture		Culture
STOLC	Stool culture		Culture
SMH	Streptomycin	(2 h)	HPLC
WSUPR	Superficial wound culture		Culture
SWT	Sweat test		send out
inquire	T cell receptor V beta expression		Flow Cytometry
inquire	T cell receptor, Alpha beta		Flow Cytometry
inquire	T cell receptor, gamma delta		Flow Cytometry
ATUPT	T3-Uptake		
TAMPGX	Tamoxifen pharmacogenetic test		PCR
TES	Testosterone		send out
TET	Tetanus IgG antibody titer		
THEO	Theophylline TDM		send out
THRS	Throat screen for strep		Culture

ADx Alphabetized Test Menu cont.

Test Code	Test Description	Notes	Method
THRC	Throat/Nasal culture		Culture
ATSH	Thyroid stimulating hormone		send out
ATHYX	Thyroxine (T4)		send out
TIPV	Tipranavir		HPLC
ATOBR	Tobramycin TDM		send out
TBILIX	Total bilirubin		
TPX	Total protein		
TRIGX	Triglycerides		
NJTROP	Troponin		
ATRYPS	Tryptase	Mast cell activation	send out
TNFA	Tumor necrosis factor (TNF) alpha	Cytokine TNF alpha	Immunoassay
BUNX	Urea nitrogen		
URICX	Uric acid		
AUA	Urinalysis		
MT	Urine 5-hydroxyindoleacetic acid		send out
UHCG	Urine beta hCG		Agarose electrophoresis
UCAX	Urine calcium		Agarose electrophoresis
UCLX	Urine chloride		
UCREAX	Urine creatinine		
URINE	Urine culture		Culture
UDRGS	Urine drug abuse screen		
MT	Urine metanephrines		send out
MT	Urine N-Telopeptide (NTX)		send out
UPHOX	Urine phosphorus		
UKX	Urine potassium		
UPELE	Urine protein electrophoresis		
UNAX	Urine sodium		
MTPX	Urine total protein		
UUNX	Urine urea nitrogen		
UURCX	Urine uric acid		
MT	Urine vanillylmandelic acid		send out
AVALPA	Valproic acid (Depacote, Depakene) TDM		send out
AVANC	Vancomycin TDM		send out
VARS	Varicella IgG antibody titer		ELISA
VZPCR	Varicella zoster by PCR		PCR
VRC	Viral culture		send out
AVITA	Vitamin A		send out
AVTB12	Vitamin B12		send out

ADx Alphabetized Test Menu cont.

Test Code	Test Description	Notes	Method
ACLTR	Vitamin D, 1, 25-Dihydroxy		send out
AVD25	Vitamin D, 25-Hydroxy		send out
AVITE	Vitamin E		send out
VORL	Voriconazole	(2 h)	HPLC
WARPGX	Warfarin pharmacogenetic test		PCR
WBCAN	Whole blood proliferation to candida antigen	Candida lymphocyte proliferation	Cell culture
WBCON	Whole blood proliferation to ConA mitogen	Concanavalin A lymphocyte proliferation test	Cell culture
WBPHA	Whole blood proliferation to PHA mitogen	Phytohemagglutinin lymphocyte proliferation test	Cell culture
WBPWM	Whole blood proliferation to PWM mitogen	Pokeweed mitogen lymphocyte transformation	Cell culture
WBTET	Whole blood proliferation to tetanus antigen	Tetanus lymphocyte proliferation assay	Cell culture

APPENDIX

Information sheets

Allergen-specific IgE antibody

Alpha-1 Antitrypsin Phenotyping

Anti-FcεR1 antibody

Autoantibodies to C1q-CLR

C3-Nephritic Factr

Dihydrorhodamine (DHR) oxidation for oxidative metabolism

Hypersensitivity Pneumonitis and Serum Precipitins

Lymphocyte Function Assays

Nitroblue Tetrazolium (NBT) Dye Reduction for Oxidative Metabolism

Neutrophil Bactericidal Assay

Neutrophil Chemotaxis

Allergy Testing

IgG Antibodies to Common Allergens

Precipitins

Allergen specific IgE to grass, tree, weed and occupational allergens

Allergen specific IgE to foods

Allergen specific IgE to animals, housedust mites, molds, venoms and insects

Allergen-specific IgE antibody

In the United States, allergists/immunologists utilize skin testing as the primary method for detection of specific IgE since it is rapid, east and it is considered the most sensitive way to detect allergen-specific IgE in a clinical setting. The various clinical indication for allergy testing and the comparisons of skin testing and in vitro testing have been thoroughly reviewed by W.K. Dolen [1].

The laboratory at National Jewish uses the Pharmacia CAP system for detection of allergen-specific IgE antibody. In this assay allergens are coupled to a cellulose sponge-like matrix (ImmunoCAP). This solid phase support is then used to determine specific IgE binding by the patient's serum. Results are reported quantitatively in units/ml related to a WHO standard and by "class".

A partial list of allergens that can be used to determine specific IgE antibody are shown on the attached page. In addition the laboratory at National Jewish has worked with investigators to measure specific IgE antibody to allergens that are not commercially available [2]. Check with laboratory for availability of IgG allergen specific tests.

Test code:	See attached list of antigens
Method:	EIA
Reference range:	N>0.35 kU/liter or Class 0
Specimen requirement:	Serum, 1-3 ml depending on the number of tests ordered
Transport requirements:	If sending sera from outside of National Jewish please ship either frozen or on an ice pack and received in the laboratory 24 hours after drawing.
Days test is performed:	Twice weekly.
Turn-around time:	Two days after receipt
CPT code:	86003

References:

1. Dolen WK. 2002. The diagnostic allergy laboratory. In N.R. Rose, R.G. Hamilton and B. Detrick (ed.), Manual of Clinical Laboratory Immunology, 6th ed. American Society for Microbiology, Washington, D.C.
2. Sarlo K, Schnell B, Harbeck RJ, Leto D, Finn EE and Kirchner DB. Sensitivity and specificity of a serological test that detects human IgE antibody to the Bacillus enzyme Y217L BPN. Society of Toxicology Meeting. 2003.

Alpha-1 Antitrypsin Phenotyping

Alpha-1 antitrypsin is a polymorphic glycoprotein found in normal human serum. Certain phenotypes have been associated with lower serum levels of alpha-1 antitrypsin. Emphysema and certain liver disorders have been related to the deficient state.

Most of the Pi variants are identified by their mobility in electrophoretic systems. Pi M is the most common allele in all populations tested. All alleles appear to fit the model of autosomal codominance at one locus. A slight reduction in the concentration of alpha-1 antitrypsin, i.e., 50-70% of normal, is associated with the alleles, P, S, and I. The most common of the deficiency alleles is Pi Z, present in most populations at a frequency of 0.02 or less. With this phenotype, the concentration of alpha-1 antitrypsin is usually 10-15% of normal. The low serum concentration of alpha-1 antitrypsin in Pi Z individuals is due to impaired secretion of the Z protein, which accumulates in inclusions in the rough endoplasmic reticulum of the hepatocytes. Pi "null" is a rare deficiency allele that cannot be detected by Pi typing but may be inferred from reduced quantities of alpha-1 antitrypsin and from pedigree data.

Test code:	AATP
Method:	Isoelectric focusing.
Reference range:	The subtypes of M will not be reported. Over 99% of M phenotypes are genotypically MM. The absence of family studies, the phenotype "M" and quantitative levels can be used to infer to gentoype "MM". The most common alleles associated with a deficiency are Z and S.
Specimen requirement:	1 ml of serum.
Transport requirements:	If shipped from outside of National Jewish the specimen should be sent frozen or with an ice pack if it is received with 24 hours.
Days test is performed:	Once per week.
Turn-around time:	48 hours after test is run.
CPT code:	82104

Anti-FcεR1 antibody

Approximately 40% of patients with chronic urticaria have antibodies to the high affinity IgE receptor (FcεR1). Patients with autoantibodies are currently identified by histamine release assay, autologous serum skin tests and Western blot. CD203 is expressed specifically on basophils, mast cells and their CD34+ progenitor cells and is upregulated by cross-linking of the FcεR1. Our laboratory has shown that sera from patients with chronic urticaria significantly upregulate basophil CD203c expression as measured by flow cytometry (1).

Test code:	IGERAB
Method:	Flow cytometry
Reference range:	>2% or by report
Specimen requirements:	1 ml of serum
Transport requirements:	Sera should be shipped frozen and received in the laboratory within 24 hours after drawing.
Days test is performed:	Mondays
Turn around time:	1 week
CPT code:	88184, 88185 (2)

References:

[1] Yasnowsky K.M., Schoen D.J., Vedanthan, P.K., Alam R., Dreskin, S.C., and Harbeck, R.J. 2005. Basophil CD203c expression isupregulated by chronic urticaria sera. American Academy of Allergy, Asthma and Immunology (abstract).

Autoantibodies to C1q-CLR

Autoantibodies that bind to complement proteins in their native state, or to neoepitopes that are exposed during complement activation, appear to play a role in the pathogenesis of several diseases. These include antibodies to the C3 convertases (C2- and C4-Nephritic Factors), antibodies to C1-esterase inhibitor, and antibodies to the collagen-like region of C1q (C1q-CLR).

IgG antibodies to the collagen-like region (CLR) of C1q were first described in patients with systemic lupus erythematosus (SLE). Although any organ system can be involved, the microvasculature of the kidney, skin, joints and serosal surfaces is particularly affected. About 30% of SLE patients have serum anti-C1q antibodies associated with proliferative glomerulonephritis. Anti-C1q antibodies have also been found in 30-70% of patients with rheumatoid vasculitis, idiopathic MPGN, and Goodpasture's syndrome. Serum anti-C1q is detectable in 100% of patients with hypocomplementemic urticarial vasculitis syndrome (HUVS), an autoimmune disease related to SLE. Hallmarks of HUVS include recurrent idiopathic urticaria-like lesions that on biopsy show leukocytoclastic vasculitis with deposition of immunoglobulins and complement proteins. Patients with HUVS may also develop angioedema, uveitis or iritis, mesangial nephritis or MPGN, and obstructive lung disease. The association of these antibodies with cutaneous vasculitis in HUVS and proliferative glomerulonephritis in SLE suggests that they may block C1q from interacting with circulating immune complexes (CIC) in the microvasculature. Indeed, anti-C1q antibodies have been found in some disorders, only IgG anti-C1q antibody, predominantly IgG2, is found in SLE and HUVS sera. Analysis of complement in serum from patients with anti-C1q antibodies shows decreases in C1q and in classical pathway activity (CH50) but not in the alternative pathway (AH50).

Test code:	C1QAB
Method:	ELISA
Reference range:	1.1-7.7% of standard
Specimen requirement:	0.5 ml Serum, frozen at -70˚C or on dry ice
Transport requirements:	Overnight on dry ice
Turn around time:	Two weeks
CPT code:	83520

C3-Nephritic Factor

Autoantibodies that bind to complement proteins in their native state, or to neoepitopes that are exposed during complement activation, appear to play a role in the pathogenesis of several diseases. These include antibodies to the C3 convertases (C3-and C4-Nephritic Factors), antibodies to C1-esterase inhibitor, and antibodies to the collagen-like region of C1q (C1q-CLR).

The Nephritic Factors are found in serum or plasma from patients with profound hypocomplementemia and chronic mesangiocapillary or membranoproliferative glomerulonephritis. They are also present in partial lipodystrophy as well as in occasional hypocomplementemic patients with no symptoms. The nephritic factors interfere with regulation of complement by binding to the C3 convertases, thus retarding the decay of the enzymes and allowing uncontrolled cleavage of C3 to occur. Profound depletion of C3 results. Both the CH50 and AH50 are low in such patients. C3-NeF can be identified by its ability to cause alternative pathway dependent consumption of C3 when the patient's serum is mixed with that of a healthy donor.

Test code:	C3NEF
Method:	2-Dimensional Immunoelectrophoresis
Reference range:	Negative
Specimen requirement:	0.5 ml Serum, frozen at -70˚C or on dry ice
Transport requirements:	Overnight on dry ice
Turn-around time:	Four weeks
CPT code:	86161

Dihydrorhodamine (DHR) oxidation for oxidative metabolism

Defects in the NADPH oxidase enzyme pathway lead to life-threatening infections in chronic granulomatous disease (CGD). CGD is a genetic disorder estimated to occur in about 1 in 250,000 persons and is characterized by severe, recurrent infections with primarily catalase-producing bacteria and fungi and tissue granuloma formation. Four separate genotypes, i.e., one X-linked (gp91-phox) and three autosomal recessive (p22-phox, p47-phox and p67-phox) have been described. The neutrophil, eosinophil, and macrophage use the NADPH oxidase enzyme complex to augment molecular oxygen by one electron yielding superoxide. This in turn is converted to hydrogen peroxide by superoxide dismutase. Hydrogen peroxide is combined with a halide by myeloperoxidase to produce hypochlorous acid in the neutrophil.

In the assay performed at National Jewish DHR in the neutrophils is oxidized to rhodamine by activation of the NADPH oxidase and the rhodamine is detected by flow cytometry.

Test code:	DHR
Method:	Flow cytometry.
Reference range:	An index is calculated by dividing mean fluorescence intensity of the neutrophils loaded with DHR and stimulated with PMA by the mean fluorescence intensity of the neutrophils that are only loaded with DHR. For normal individuals this index should be >30. In addition all profiles are visually examined for multiple populations of fluorescent cells to detect carrier states.
Specimen requirement:	A minimum of 1 ml of heparinized whole blood.
Transport requirements:	18-23°C. Blood must be received in the laboratory within 24 hours after drawing. If blood is sent to the laboratory from outside National Jewish it is recommended that normal heparinized blood be sent with the patient's blood to control for shipping conditions.
Days test is performed:	Monday - Friday. Please schedule with laboratory.
Turn-around time:	24 hours after receipt.
CPT code:	82657 x 2

Hypersensitivity Pneumonitis and Serum Precipitins

Hypersensitivity pneumonitis or extrinsic allergic alveolitis is an allergic lung disease in susceptible individuals that results from exposure and sensitization to antigens present in organic dusts. Individuals with hypersensitivity pneumonitis present clinically with intermittent episodes of chills, fever, cough and shortness of breath which occurs 4 to 8 hours after the inhalation of specific sensitizing agents. Immunodiffusion analysis is the most commonly used technique for the serodiagnosis of aspergillosis and hypersensitivity pneumonitis.

As shown on the attached pages the laboratory has a large number of antigens that can be used to aid in the serodiagnosis of hypersensitivity pneumonitis. In addition, the laboratory is able to prepare extracts that can be used for immunodiffusion for identification of serum precipitins. Please contact the laboratory for information on submitting material to the laboratory.

Test code:	See attached list of antigens.
Method:	Immunodiffusion.
Reference range:	Negative.
Specimen requirement:	A minimum of 1-3 ml of serum depending on the number of tests ordered.
Transport requirement:	If sending sera from outside of National Jewish please ship either frozen or on an ice pack and received in the laboratory 24 hours after drawing.
Days test is performed:	Mondays.
Turn-around time:	Results available by Thursday.
CPT code:	86331

Lymphocyte Function Assays

The lymphocyte proliferation (or transformation) test is an *in vitro* procedure that is often used to assess cellular immunity in patients with immunodeficiency disorders or other disorders where cellular immunity may be compromised. Lymphocytes are stimulated in vitro to become metabolically active by mitogens or recall antigens. Cell division results in increased DNA synthesis and ^{3}H-thymidine incorporation is often used as an indicator of that synthesis.

The laboratory routinely assays for lymphocyte responses to phytohemagglutin (PHA), concanavalin A (Con A), pokeweed mitogen (PWM) and two antigens, Candida and tetanus.

The laboratory can also determine proliferation responses to other antigens including responses to vaccines.

Test code:	PHA: LSPHA; ConA: LSCON; PWN: LSPWM; Candida: LSCAN; tetanus: LSTET.
Method:	Cell culture.
Reference range:	By report. An interpretation accompanies all reports.
Specimen requirements:	20 ml of heparinized blood. For pediatric patients or in individuals where this amount of blood is not possible to obtain, the laboratory can do a "whole-blood" method with as little as 2 ml of heparinized blood.
Transport requirements:	18-23°C. Blood should be received in the laboratory within 24 hours after drawing.
Days test is performed:	Monday – Friday. Please schedule with laboratory.
Turn around time:	Mitogen results are available 5 days after the blood is received while antigen results are available within 10 days.
CPT code:	Each antigen and mitogen: 86353

Nitroblue Tetrazolium (NBT) Dye Reduction Test for Oxidative Metabolism

Defects in the NADPH oxidase enzyme pathway lead to life-threatening infections in chronic granulomatous disease (CGD). CGD is a genetic disorder estimated to occur in about 1 in 250,000 persons and is characterized by severe, recurrent infections with primarily catalase-producing bacteria and fungi and tissue granuloma formation. Four separate genotypes, i.e., one X-linked (gp91-*phox*) and three autosomal recessive (p22-*phox*, p47-*phox* and p67-*phox*) have been described. The neutrophil, eosinophil, and macrophage use the NADPH oxidase enzyme complex to augment molecular oxygen by one electron yielding superoxide. This in turn is converted to hydrogen peroxide by superoxide dismutase. Hydrogen peroxide is combined with a halide by myeloperoxidase to produce hypochlorous acid in the neutrophil.

The NBT as performed at National Jewish stains the neutrophils that have adhered to glass and have been activated to undergo oxidative metabolism. Normal granulocytes produce superoxide and reduce soluble yellow NBT dye to blue-black formazan. Because this assay is read by light microscopy, individual cells reducing or not reducing NBT can be recognized. Mothers of patients with X-linked CGD show mosaicism of peripheral blood neutrophil's NBT reduction.

Test code:	NBT
Method:	Microscopic examination after staining.
Reference range:	Greater than 95% of normal neutrophils will reduce NBT. In patient's with CGD, there is usually no NBT reduction. X-linked carriers will show a mosaic pattern with most patients exhibiting 20-80% NBT reducing cells.
Specimen requirement:	A minimum of 1 ml of heparinized whole blood.
Transport requirements:	18 - 23°C. Blood must be received in the laboratory within 24 hours after drawing. If blood is sent to the laboratory from outside National Jewish it is recommended that normal heparinized blood be sent with the patient's blood to control for shipping conditions.
Days test is performed:	Monday - Friday. Please schedule with laboratory.
Turn-around time:	24 hours after receipt.
CPT code:	82657 x 2

Neutrophil Bactericidal Assay

Once a microorganism is ingested, both oxygen-dependent and independent processes result in the destruction of the ingested microorganism. The bactericidal assay assesses the ability of phagocytic cells to accomplish these functions. Individuals with deficiencies in their neutrophils fail to initiate antimicrobial activity. For example patients with chronic granulomatous disease show diminished or absent killing activity.

In the assay leukocyte killing is measured by incubating opsonized bacteria (*Staphylococcus aureus*) with leukocytes at a 1:1 ratio and determining the number of viable bacteria at 30 minute intervals for 2 hours.

In addition to *Staphylococcus aureus*, the laboratory has experience in determining the neutrophil bactericidal activity against a variety of other bacteria.

Test code:	BACT1
Method:	Phagocytosis and microbial culture
Reference range:	>75% killing at 90 or 120 minutes. An interpretation accompanies all reports.
Specimen requirement:	15 ml of heparinized blood.
Transport requirement:	18-23°C. Blood should be received in the laboratory within 24 hours after drawing.
Days test is performed:	Monday-Friday. Please schedule with laboratory.
Turn-around time:	Results available 48 hours after receipt in laboratory.
CPT code:	86344

Neutrophil Chemotaxis

Disorders of leukocyte function have been described in individuals with chronic recurrent bacterial infections. Disorders involving chemotaxis are found in only a few diseases; secondary causes of depressed chemotaxis are more common. Actin dysfunction, Chediak-Higashi syndrome, LAD1, secondary granule deficiency, and Job's syndrome all show decreased chemotaxis. Recently the clinical immunology laboratory at National Jewish described abnormal neutrophil chemotactic activity associated with a patient with Rac2 mutation [1].

Neutrophils have the capacity to move in response to nanomolar concentrations of chemotactic stimuli. The stimulus can be from a variety of sources. The assay used in our laboratory measures directional migration towards a fragment of complement (C5a). The isolated leukocyte population is placed in a Boyden chamber and the cells migrate through a filter toward the C5a. Assessment of the results involves measuring the distance the neutrophils migrate and comparing this to a normal, control leukocyte population assayed in parallel and to the laboratories reference range.

Test code: CTX1.

Method: Cell migration in Boyden chamber.

Reference range: By report.

Specimen requirement: 10 ml of heparinized whole blood. If sending from outside of National Jewish it is recommended that 10 ml of normal blood be sent with the patient's blood to control for shipping conditions.

Transport conditions: 18-23°C. Blood should be received in the laboratory within 24 hours after drawing.

Days test is performed: Tuesday – Friday. Please schedule with laboratory.

Turn around time: 48 hours after receipt.

CPT code: 86155

References:

1. Ambruso D, Knall C, Abell AN, Panepinto J, Kurkchubasche A, Thurman G, Gonzalez-Aller C, Hiester A, deBoer M, Harbeck RJ, Oyer R, Johnson G, Roos D. Human neutrophil immunodeficiency syndrome is associated with an inhibitory Rac2 mutation. Proc Natl Acad Sci USA. 97(9):4653-9, 2000.

Allergen specific IgE

(Animals, Housedust Mites, Molds, Venoms and Insects)

ANIMAL EPIDERMAL & PROTEIN ALLERGENS	
RE1	Cat dander
RE2	Dog epithelium*
RE3	Horse dander
RE4	Cow dander
RE5	Dog dander
RE6	Guinea pig epithelium
RE7	Pigeon droppings*
RE70	Goose feathers*
RE71	Mouse epithelium
RE72	Mouse urine proteins
RE73	Rat epithelium*
RE74	Rat urine proteins
RE75	Rat serum proteins
RE76	Mouse serum proteins
RE77	Parakeet (budgerigar) droppings
RE78	Parakeet (budgerigar) feathers
RE79	Parakeet (budgerigar) serum proteins
RE80	Goat epithelium
RE81	Sheep epithelium
RE82	Rabbit epithelium
RE83	Swine epithelium
RE84	Hamster epithelium
RE85	Chicken feathers
RE86	Duck feathers
RE87	Rat epithelium and proteins
RE88	Mouse
RE89	Turkey feathers*
RE201	Canary bird feathers*
RE202	Reindeer epithelium*
RE202	Bovine albumin*
RE205	Horse serum proteins*
RE206	Rabbit serum proteins*
RE208	Chinchilla epithelium*
RE211	Rabbit urine proteins*
RE212	Swine urine proteins*
RE213	Parrot feathers*
RE214	Finch feathers*
RE215	Pigeon feathers*
RE216	Deer epithelium*
RE217	Ferret epithelium*
RE222	Swine serum albumin*

HOUSE DUST ALLERGENS	
RH1	House dust (Greer)
RH2	House dust (Hollister-Stier)
HOUSE DUST MIX	
RHX2	Dust mix (RH2,RD1,RD2,RI6)
MITE ALLERGENS	
RD1	Dust mite (D. pteronyssinus)
RD2	Dust mite (D. farinae)
RD3	Dust mite (D. microceras)
RD71	Storage mite (L. destructor)
MOLD ALLERGENS	
RM1	Penicillium notatum*
RM2	Cladosporium herbarum
RM3	Aspergillus fumigatus
RM4	Mucor racemosus
RM5	Candida albicans
RM6	Alternaria alternata
RM7	Botrytis cinerea
RM8	Helminthosporium halodes
RM9	Fusarium proliferatum*
RM10	Stemphylium botryosum
RM11	Rhizopus nigricans
RM12	Aureobasidium pullulans
RM13	Phoma betae
RM14	Epicoccum purpurascens
RM15	Trichoderma viride
RM16	Curvularia lunata*
RM70	Pityrosporum orbiculare
RM201	Ustilago nuda/tritici*
RM202	Cephalosporium acremonium
RM203	Trichosporon pullulans*
RM204	Ulocladium chartartum*
RM205	Trichophyton rubrum
RM207	Aspergillus niger*
RM208	Chaetomium globosum*
RM209	Penicillium frequentans*
RM210	Trichophyton goetzii*
RM211	Trichophyton interdigitale*
RM223	Staphylococcal enterotoxin C*
RM224	Staphylococcal enterotoxin D*
RM225	Staphylococcal enterotoxin TSST*

*For Investigational Use Only

Allergen specific IgE cont. (Animals, Housedust Mites, Molds, Venoms and Insects)

MOLD MIX	
RMX1	Mold mix (RM1, RM2, RM3, RM6)
VENOM & INSECT ALLERGENS	
R11	Honey bee venom
R12	White-faced hornet venom
R13	Common wasp (yellow jacket) venom
R14	Paper wasp venom
R15	Yellow hornet venom
R16	Cockroach
R18	Moth*
R170	Fire ant
R171	Mosquito
R172	Green nimitti
R173	Blood worm
R175	European hornet venom*
R176	Berlin beetle
RI201	Horse bot fly
RI204	Horse fly

*For Investigational Use Only

Allergen specific IgE to Foods

FOOD ALLERGENS	
RF1	Egg white
RF2	Milk (cow)
RF3	Fish, cod
RF4	Wheat
RF5	Rye
RF6	Barley
RSF7	Oat
RF8	Maize, corn
RF9	Rice
RF10	Sesame seed
RF11	Buckwheat
RF12	Pea
RF13	Peanut
RF14	Soybean
RF15	White bean*
RF17	Hazel nut*
RF18	Brazil nut
RF20	Almond
RF23	Crab
RF24	Shrimp
RF25	Tomato
RF26	Pork
RF27	Beef
RF31	Carrot
RF33	Orange
RF35	Potato
RF36	Coconut
RF35	Blue mussel
RF40	Tuna
RF41	Salmon
RF44	Strawberry
RF45	Yeast
RF47	Garlic
RF48	Onion
RF49	Apple
RF50	Mackerel, chub*
RF51	Bamboo shoot*
RF55	Millet, common
RF56	Millet, foxtail*
RF57	Millet, japanese*
RF58	Squid, pacific*
RF59	Octopus*
RF60	Jack mackerel, scad*

FOOD ALLERGENS	
RF61	Sardine*
RF75	Egg yolk*
RF76	Alpha-lactalbumin
RF77	Beta-lactoglobulin
RF78	Casein
RF79	Gluten
RF80	Lobster
RF81	Cheese, cheddar type
RF82	Cheese, mold type
RF83	Chicken meat
RF84	Kiwi fruit
RF85	Celery
RF86	Parsley
RF87	Melon
RF88	Mutton (lamb)
RF89	Mustard
RF90	Malt
RF91	Mango fruit*
RF92	Banana
RF93	Cacao
RF95	Peach
RF96	Avocado
RF201	Pecan nut
RF202	Cashew nut
RF203	Pistachio
RF204	Trout
RF205	Herring*
RF206	Mackerel*
RF207	Clam
RF208	Lemon
RF209	Grapefruit
RF210	Pineapple
RF211	Blackberry*
RF212	Mushroom*
RF213	Rabbit meat*
RF214	Spinach
RF215	Lettuce
RF216	Cabbage
RF217	Hazel nut*
RF218	Paprika, sweet pepper*
RF219	Fennel seed*
RF220	Cinnamon*
RF221	Coffee*

*For Investigational Use Only

Allergen specific IgE to Foods cont.

FOOD ALLERGENS	
RF222	Tea*
RF225	Pumpkin*
RF226	Pumpkin seed*
RF227	Sugar beet seed*
RF231	Milk, boiled*
RF232	Ovalbumin*
RF233	Ovomucoid*
RF234	Vanilla*
RF235	Lentil
RF236	Whey*
RF237	Apricot
RF242	Cherry
RF244	Cucumber*
RF245	Egg, whole
RF246	Guar/guar gum*
RF247	Honey*
RF253	Pine nut, pignoles*
RF254	Plaice*
RF255	Plum
RF256	Walnut*
RF258	Squid*
RF259	Grape
RF260	Broccoli
RF261	Asparagus*
RF262	Aubergine, egg plant*
RF263	Green pepper, unripe seed*
RF264	Eel*
RF265	Caraway*
RF268	Clove*
RF269	Basil*
RF270	Ginger*
RF271	Anise*
RF272	Tarragon*
RF273	Thyme*
RF274	Marjoram*
RF277	Dill*
RF278	Bay leaf*
RF279	Chili pepper*
RF280	Black pepper*
RF281	Curry*
RF282	Nutmeg*
RF283	Oregano*
RF284	Turkey meat

FOOD ALLERGENS	
RF287	Kidney bean, red*
RF288	Blueberry*
RF289	Date*
RF290	Oyster
RF291	Cauliflower*
RF293	Papaya*
RF294	Passion fruit*
RF299	Chestnut sweet
RF300	Goat milk*
RF302	Mandarin*
RF303	Halibut*
RF304	Langust (spiny lobster)*
RF306	Lime*
RF309	Chick pea*
RF311	Megrim*
RF312	Swordfish*
RF315	Green bean*
RF316	Rape seed*
RF317	Coriander*
RF319	Beetroot*
RF320	Crayfish
RF324	Hop (fruit cone)*
RF332	Mint*
RF333	Linseed*
RF337	Sole*
RF338	Scallop*
RF343	Raspberry*
RF344	Sage*
RF345	Macadamia nut*

FOOD MIXES	
RFX1	Nut Mix (RF13, RF17, RF18, RF20, RF36)
RFX2	Fish Mix (RF3, RF24, RF37, RF40, RF41)
RFX3	Grain Mix (RF4, RSF7, RF37, RF40, RF41)
RFX5	Pediatric Mix (RF1, RF2, RF3, RF4, RF13, RF14)

*For Investigational Use Only

Allergen specific IgE

(Grass, Tree, Weed and Occupational Allergens)

GRASS ALLERGENS	
RG1	Sweet vernal grass
RG2	Bermuda grass
RG3	Cocksfoot (orchard grass)*
RG4	Meadow fescue
RG5	Rye grass
RG6	Timothy grass
RG7	Common reed
RG8	Meadow grass, kentucky blue
RG9	Redtop, bentgrass
RG10	Johnson grass
RG11	Brome grass
RG12	Rye, cultivated*
RG13	Velvet grass
RG14	Oat, cultivated
RG15	Wheat, cultivated
RG16	Meadow foxtail
RG17	Bahia grass
RG70	Wild rye grass
RG71	Canary Grass
RG201	Barley*
RG202	Maize, corn*
RG203	Salt grass*
RG204	False oat-grass*

GRASS MIXES	
RGX1	Grass mix 1 (RG3,RG4,RG5,RG6,RG8)
RGX2	Grass mix 2 (RG2,RG5,RG6,RG8,RG10,RG17)

TREE ALLERGENS	
RT1	Box-elder
RT2	Alder, grey
RT3	Birch, common silver
RT4	Hazel
RT5	Beech, american
RT6	Mountain juniper
RT7	Oak
RT8	Elm
RT9	Olive*
RT10	Walnut
RT11	Maple leaf sycamore, london plane*
RT12	Willow
RT14	Cottonwood

TREE ALLERGENS (CONT)	
RT15	White ash
RT16	White pine
RT17	Japanese cedar
RT18	Eucalyptus, gum tree
RT19	Acacia
RT20	Mesquite
RT21	Melaleuca, cajeput-tree
RT22	Pecan, hickory
RT23	Italian/Funeral cypress
RT70	Mulberry
RT72	Queen palm
RT73	Pine, australian
RT201	Spruce*
RT203	Chestnut, horse*
RT205	Elder*
RT206	Chestnut*
RT207	Douglas fir*
RT209	Horn beam*
RT210	Privet*
RT211	Sweet gum*
RT212	Cedar*
RT213	Pine*
RT214	Date*
RT217	Peppertree*
RT218	Oak,Virginia live*

TREE MIXES	
RTX1	Tree mix 1 (RT1, RT3,RT7,RT8)
RTX2	Tree mix 2 (RT1,RT7, RT8,RT14,RT22)
RTX3	Tree mix 3 (RT6,RT7, RT8,RT14,RT20)

WEED ALLERGENS	
RW1	Ragweed, common
RW2	Ragweed, western
RW3	Ragweed, giant
RW4	Ragweed, false
RW5	Wormwood
RW6	Mugwort
RW7	Marguerite, ox-eye daisy
RW8	Dandelion

*For Investigational Use Only

Allergen specific IgE cont. (Grass, Tree, Weed and Occupational Allergens)

WEED ALLERGENS (CONT)	
RW9	Plantain (English), ribwort
RW10	Goosefoot, lamb's quarters
RW11	Saltwort, russian thistle
RW12	Golden rod
RW13	Cocklebur
RW14	Pigweed, common
RW15	Scale, lenscale
RW16	Marshelder, rough
RW17	Firebrush, kochia
RW18	Sheep sorrel
RW19	Wall pellitory (officinalis)
RW20	Nettle
RW21	Wall pellitory (judaica)
RW203	Rape*
RW204	Sunflower*
RW206	Camomile*
RW207	Lupin*
RW208	Lycopodium*
RW210	Sugar beet*
WEED MIXES	
RWX1	Weed mix 1 (RW1,RW6, RW9,RW10,RW11)
RWX2	Weed mix 2 (RW2,RW6, RW9,RW10,RW15)
OCCUPATIONAL ALLERGENS	
RK70	Green coffee beans
RK75	Isocyanate TDI
RK76	Isocyanate MDI
RK77	Isocyanate HDI
RK78	Ethylene oxide
RK80	Formaldehyde/Formalin*
RK82	Latex*
RK83	Cotton seed*
RK86	Trimellitic anhydride*
RSC1	Penicilloyl G

CHEMICAL (DRUG) ALLERGENS	
RSC5	Ampicilloyl
RSC6	Amoxicilloyl
RC70	Insulin, porcine*
RC71	Insulin, bovine*
RC73	Insulin, human*

*For Investigational Use Only

Precipitins

HYPERSENSITIVITY SCREENING ANTIGENS	
TH3	Thermoactinomyces vulgaris
T1	Micropolyspora faeni
CAND	Candida
EB1	Pigeon serum
TH5	Aureobasidium pullulans
M1	Aspergillus polyvalent mix
EXOTIC BIRDS ANTIGENS	
EB1	Pigeon serum
EB2	Pigeon droppings
EB3	Canary serum
EB4	Canary droppings
EB5	Budgerigar (parakeet) serum
EB6	Budgerigar (parakeet) droppings
EB7	Parrot serum
EB8	Parrot droppings
EB9	Cockatiel serum
EB10	Cockatiel droppings
EB11	Cockatoo serum
EB12	Cockatoo droppings
Please call lab for availability of other bird antigens not listed above	
ANIMAL HANDLERS ANTIGENS	
AH1	Dog serum
AH2	Cat serum
AH3	Guinea pig serum
AH4	Hamster serum
AH5	Mouse serum
AH6	Rabbit serum

FARM ANIMAL ANTIGENS	
FA1	Bovine serum
FA2	Goat serum
FA3	Horse serum
FA4	Porcine serum
FA6	Sheep serum
OTHER ANIMAL ANTIGENS	
FL6	Rat serum
MILK ANTIGENS	
WMILK	Whole milk
MILK5	1:5 dilution of whole milk
MIL50	1:50 dilution of whole milk
BSA10	Bovine serum albumin
BGG10	Bovine gamma globulin
CAS10	Casein
LAC10	Lactalbumin
BOVS	Bovine serum
BOVG	Bovine globulins
ASPERGILLUS ANTIGENS	
ASPF1	Aspergillus fumigatus #1
ASPNG	Aspergillus niger
ASPFL	Aspergillus flavus
M1	Aspergillus polyvalent mix
ASPF6	Aspergillus fumigatus #6
HISTO	Histoplasma capsulatum
BLAST	Blastomyces dermatitidis
COCCI	Coccidioides immitis
MOLD ANTIGENS	
M1	Aspergillus polyvalent mix
M2	Alternaria sp
M3	Cladosporium sp
M4	Epicoccum
M5	Fusarium
M6	Geotrichum
M7	Helminthosporium
M8	Curvularia
M9	Monilia sitophilus

Precipitins cont.

MOLD PRECIPITIN ANTIGENS (CONT)	
M10	Mucor
M11	Penicillium mix
M12	Rhizopus sp
M13	Scopulariopsis
M14	Stemphyllium
M15	Streptomyces
M16	Trichoderma
M17	Verticillium
THERMOPHILE ANTIGENS	
TH3	Thermoactinomyces vulgaris
T1	Micropolyspora faeni
TH5	Aureobasidium pullulans
M1	Aspergillus polyvalent mix
GRAIN ANTIGENS	
GP1	Alfalfa pollen
GP2	Barley
GP3	Corn pollen
GP4	Grain dust
GP5	Grain dust (western)
GP6	Hay
GP7	Milo
GP8	Oat
GP9	Wheat
GP10	Wheat pollen
GP11	Rye
GP12	Soy
FARMERS LUNG ANTIGENS	
GP4	Grain dust
GP5	Grain dust (western)
GP6	Hay
FL4	Chicken serum
FL6	Rat serum
AH5	Mouse serum
TH3	Thermoactinomyces vulgaris
T1	Micropolyspora faeni
TH5	Aureobasidium pullulans
M1	Aspergillus polyvalent mix

IgG Antibodies to Common Allergens

Total IgG antibodies by ELISA to the following antigens:

- Alternaria tenius
- Aspergillus
- Cladosporium herbarum
-
- Honey bee
- House dust mite (D. farinae)
- House dust mite (D. pteronyssinus
- Mixed vespid venom
- Timothy grass

Test code: TGMIS
Specify antigen or call lab for current information about unlisted antigens: 303.398.1344