

NEPHROLOGY

- 003 ANCA (anti-neutrophil cytoplasmic antibodies)
014 Circulating Immune Complexes (CIC)
270 GBM - Glomerular basement membrane *antibody titer*
290 **Nephrology Profile** includes 003, 270

SPECIMEN REQUIREMENTS

Specimen Collection Kits are available free of charge from IMMCO Diagnostics. Call (800) 537-8378 for an immediate shipment of collection kits.

Specimens need not be refrigerated or frozen.

SERUM STUDIES

Collect 5-10 ml of blood in a red top or serum separator tube. If possible, separate serum from clot and place into **orange** tube provided. Do not puncture top of orange tube. If separation facilities are not available, the blood can be sent in the tube used for collection.

MULTIPLE ALLERGY TESTS or SCREENS

Include 6 to 7 ml of serum in the orange tube provided with the collection kit or in a standard red-topped tube or a serum separator tube.

GENETIC STUDIES

Send uncoagulated whole blood in 2 lavender/purple top tubes. Store refrigerated and ship on a cool pack. Do not freeze.

BIOPSY STUDIES

When submitting specimens for **immunofluorescence only**, place one biopsy specimen from the edge of the lesion in the **red** tube provided with the collection kit and place one biopsy specimen from a normal site in the **purple** tube. These tubes contain a holding solution for immunofluorescence specimens.

When submitting specimens for **routine histological studies (H&E) only**, place one incisional or excisional biopsy specimen in the **green** tube provided with the collection kit or in a tube containing 10% formalin.

When submitting specimens for **immunofluorescence and H&E studies**, take one biopsy specimen from the edge of the lesion and divide it in half. Place one half in the **green** tube provided with the collection kit or in a tube containing 10% formalin for H&E, and place the other half in the **red** tube provided with the collection kit. Take a second biopsy specimen from a normal site and place it in the **purple** tube provided with the collection kit.

For additional information, please consult the Collection & Handling section in the **TEST REFERENCE MANUAL**.

SPECIMEN REQUIREMENTS:

- Serum Studies: 2-3 ml serum
Profile Tests: 2-3 ml serum
Multiple Allergy Tests: 6-7 ml serum
Genetic Tests: 2 tubes uncoagulated whole blood
Biopsy Studies: see above

BIOPSY STUDIES

- 510 **Immunofluorescence**
IgG, IgA, IgM, Fibrin, C3 (C5b-9, IgG4)
- 511 **Light Microscopy (H&E)**
- 512 **Light Microscopic consultation**
- 513 **EB classification**
- 514 **Mycosis Fungoides**
T Lymphocyte surface markers - LCA, T, T_S, and T_H
Interpretation also requires H&E
- 515 **Lymphocyte Surface Markers**
LCA, T, T_S, T_H, & B Cell markers
frozen specimens only
Interpretation also requires H&E

SPECIAL STAINING

DIFFERENTIATION OF BP FROM EBA

Indicated when biopsy is positive for basement membrane zone deposits

- 550 Antigen mapping for localization of Collagen IV & Laminin
Only on Lesional Biopsies
- 551 Localization of immune deposits by "Induced *in vitro* split". *Only on Normal Biopsies*

BIOPSY SITE SELECTION

The proper biopsy sites for various tests and conditions are indicated below:

Direct Immunofluorescence:

- Vesiculo-bullous diseases**
Pemphigus, Pemphigoid, LABD, EBA, HG
Tissue: skin
Site: Perilesional, erythematous adjacent to active or new blister. For DH, take skin biopsy 3-5 mm away from the active lesion.

- Connective tissue disorders**
Lupus erythematosus, MCTD, dermatomyositis, scleroderma, etc.
Tissue: skin
Site: Erythematous or active border of new lesion. Take biopsy for SLE from lesional and non-lesional sun protected skin (buttock).

- Lichen Planus and Lichenoid reactions**
Tissue: skin, mucosa
Site: take biopsy from a new lesion.

- Vasculitis**
Tissue: skin
Site: Take biopsy from erythematous, active border of a fresh lesion (<48 hrs old).

- Porphyria/Pseudoporphyria**
Tissue: skin
Site: take from a new lesion.

- Histopathology (H&E):**
In all cases, take biopsy from a lesional site.

Please note that test codes listed in this form are categorized by disease association and are not necessarily in numerical order.

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CLINICAL INFORMATION

Caution: Failure to provide pertinent information may delay results

SUSPECTED DIAGNOSIS

TYPE OF BIOPSY skin oral other _____

BIOPSY SITE: Immunofluorescence (IF)

- Lesional _____
 Normal _____
 Perilesional _____

BIOPSY SITE: Histopathology (H&E)

- Lesional _____

CLINICAL DATA

THERAPY

SERUM RESULTS

For suspected SLE, check appropriate ACR criteria

- Malar rash
 Discoid rash
 Photosensitivity
 Oral or nasopharyngeal ulceration
 Arthritis
 Serositis (pleuritis or pericarditis)
 Neurologic disorder (psychosis or seizures)
- Renal disorder**
 Proteinuria (≥ 0.5 g/day)
 Cellular casts
- Hematologic disorders**
 Hemolytic anemia
 Leukopenia $< 4000\text{mm}^3$
 Lymphopenia $< 1500\text{mm}^3$
 Thrombocytopenia $< 100,000\text{mm}^3$
- Immunologic disorder**
 LE cells
 Anti-DNA antibody
 Anti-Sm antibody
 False positive syphilis serology
 Abnormal antinuclear antibody titer



TEST REQUEST FORM

IMMCO Diagnostics, Inc.

60 Pineview Drive
Buffalo, New York 14228-2120
Tel (716) 691-0091
Toll Free (800) 537-TEST
Fax (716) 691-0466
www.immco.com

IMMCO Diagnostics, Inc. complies with the Health Insurance Portability and Accounting Act (HIPAA). The information provided herein will remain strictly confidential. For a copy of IMMCO's Policy, please contact customer service.

PATIENT INFORMATION

Last Name _____ First Name _____

Social Security Number _____

Sex M F Race _____

Date of Birth ____ / ____ / ____ Specimen Date ____ / ____ / ____

Street _____

City _____ State _____ ZIP _____

Telephone (____) _____

REQUESTING DOCTOR

Last Name _____ First Name _____

UPIN _____ Specialization _____

Street _____

City _____ State _____ ZIP _____

Telephone (____) _____ Fax (____) _____

e-mail _____

BILLING INFORMATION

Send Bill to: Insurance Doctor Lab Credit Card

For insurance billing, provide complete insurance information or send photocopy of patient's insurance card. If not billing insurance, doctor or lab, please include credit card information to ensure prompt results.

Medicare No. if applicable _____

Name/address of Insurance _____

Street _____

City _____ State _____ ZIP _____

Telephone (____) _____ Fax (____) _____

Sub. Insurance ID # / BD _____

Group # _____

ICD-9 Code _____

Credit Card # _____ Exp. Date _____

VISA MasterCard AmEx

For additional collection kits please call (800) 537-TEST or indicate required kits below:

- Serum Containers
 Skin/Mucosal Biopsies and Serum (IF and H&E)
 H&E Biopsy Studies
 Otology (Hearing Loss)
 Immunogenetics

CONNECTIVE TISSUE DISEASES

Systemic Lupus Erythematosus (SLE)

- 001 ANA titer and pattern on HEp-2 & Mouse kidney
002 ANA titer and pattern on HEp-2 only
004 nDNA antibody titer
005 ssDNA antibody
007 Histone antibody
008 Phospholipid antibody; IgG, IgA & IgM
011 Rheumatoid Factor (RF); IgG, IgA & IgM
012 Ribosomal P antibody
013 RNA antibody
014 Circulating Immune Complexes (CIC)
055 β 2 Glycoprotein (β 2GP1) antibody; IgG & IgM

Antibodies to Extractable Nuclear (ENA) & Cytoplasmic Antigens

- 040 RNP, Sm, SS-A(Ro), and SS-B(La)
042 RNP
043 Sm
045 SS-A(Ro)
046 SS-B(La)
047 Scl-70
048 Jo-1
050 Ku
051 PCNA
052 PM/Scl

- 070 **CT Profile** includes 001, 004, 007, 011, 040, 047, 048, 050, 051, 052
071 **Drug induced LE Profile** includes 001, 004, 007
077 **SLE Profile I** includes 001, 004
078 **SLE Profile II** includes 001, 004, 040
079 **SLE Profile III** includes 001, 004, 007, 011, 040, 047, 048, 050

Scleroderma

- 001 ANA titer and pattern on HEp-2 & mouse kidney
005 ssDNA antibody
007 Histone antibody
042 RNP antibody
047 Scl-70 antibody
054 Centromere antibody titer
075 **Scleroderma Profile** includes 001, 042, 047, 054

Dermato/Polymyositis

- 001 ANA titer and pattern on HEp-2 & Mouse kidney
045 SS-A(Ro) antibody
048 Jo-1 antibody
049 Mi-2 antibody for dermatomyositis
050 Ku for polymyositis/scleroderma overlap
052 PM/Scl for myositis
053 SRP (Signal Recognition Particle)
072 **Myositis Profile** includes 001, 045, 048, 049, 050, 052, 053

Sjögren's Syndrome

- 001 ANA titer and pattern on HEp-2 & Mouse kidney
011 Rheumatoid Factor (RF); IgG, IgA & IgM
040 RNP, Sm, SS-A(Ro), and SS-B(La)
045 SS-A(Ro)
046 SS-B(La)
076 **Sjögren's Syndrome Profile** includes 001, 011, 045, 046

Relapsing Polychondritis

- 015 Collagen Type II antibody

Rheumatoid Arthritis

- 001 ANA titer and pattern on HEp-2 & Mouse kidney
009 Keratin (AKA) antibody titer
011 Rheumatoid Factor (RF); IgG, IgA & IgM
017 Cyclic Citrullinated Peptides (CCP) IgG antibody
073 **RA Profile I** includes 001, 011, 017
074 **RA Profile II** includes 001, 009, 011, 017

Vasculitis

- 003 ANCA (anti-neutrophil cytoplasmic antibodies) titer
056 MPO (pANCA) antibody
057 PR3 (cANCA) antibody
008 Phospholipid antibody; IgG, IgA & IgM
055 β 2 Glycoprotein (β 2GP1) antibody; IgG & IgM
014 Circulating Immune Complexes (CIC)
016 Oxidized LDL (oxLDL) antibody
270 GBM (Glomerular basement membrane) antibody titer
080 **Vasculitis Profile** includes 003, 008, 014, 270

VESICULO-BULLOUS DISEASES

Pemphigus/Pemphigoid/EBA

- 105 IC and BMZ antibodies (dual substrate)
104 IC Paraneoplastic pemphigus antibody titer
106 Differentiation of BP from EBA on "split skin"
109 Pemphigoid IgG4 antibody
122 **Pemphigus/Pemphigoid Profile** includes 105, 106

Herpes Gestationis

- 103 H.G. Factor

Dermatitis Herpetiformis (DH)

- 100 Endomysial (EMA) IgA antibody titer
101 Reticulin (ARA) IgA antibody titer
102 Gliadin (AGA) IgA and IgG antibody
108 Tissue Transglutaminase (tTG) IgA antibody
123 **DH Profile I** includes 100, 108
124 **DH Profile II** includes 100, 101, 102, 108
125 **DH Profile III** includes 100, 102, 108

Chronic Ulcerative Stomatitis (CUS)

- 107 SES-ANA stratified epithelium specific antinuclear antibody

OTOLOGY

Autoimmune Hearing Loss (SNHL)

- 001 ANA titer and pattern on HEp-2 & mouse kidney
003 ANCA Anti-neutrophil cytoplasmic antibody titer
008 Phospholipid antibody; IgG, IgA & IgM
011 Rheumatoid Factor (RF); IgG, IgA & IgM
014 Circulating Immune Complex (CIC)
015 Collagen Type II antibody
340 68kD (hsp-70) antibodies by Western Blot
350 P0 antibodies by Western blot
370 **SNHL Profile I** includes 001, 003, 008, 011, 014, 015, 340, 350
375 **SNHL Profile II** includes 340, 350

ENDOCRINOPATHIES

Type 1 Diabetes (IDDM)

- 215 Islet cell antibody titer

Thyroid

- 216 Thyroglobulin (Tg) antibody
217 Thyroid Peroxidase (TPO) microsomal antibody
218 **Thyroid Profile** includes 216, 217

Adrenal

- 213 Adrenal antibody titer

Parathyroid

- 219 Parathyroid antibody titer

Pernicious Anemia

- 214 Gastric Parietal Cell antibody titer
162 Intrinsic Factor antibody
242 **Pernicious Anemia Profile** includes 162, 214
240 **Endocrine Profile** includes 213, 214, 215, 216, 217, 219

GASTROINTESTINAL & LIVER DISEASES

Celiac Disease (CD)

- 100 Endomysial (EMA) IgA antibody titer
110 Endomysial (EMA) IgG antibody titer
101 Reticulin (ARA) IgA antibody titer
102 Gliadin (AGA) IgA and IgG antibody
108 Tissue Transglutaminase (tTG) IgA antibody
111 Tissue Transglutaminase (tTG) IgG antibody
150 HLA DQ α 1*0501, β 1*0201
120 **CD Profile I** includes 100, 108
121 **CD Profile II** includes 100, 101, 102, 108
180 **CD Profile III** includes 100, 102, 108
126 **IgA-deficient CD Profile** includes 110, 111, 401

Inflammatory Bowel Disease (IBD)

- 003 ANCA (anti-neutrophil cytoplasmic antibodies) titer
164 ASCA (Anti-Saccharomyces Cerevisiae) IgG & IgA ab
151 BPI Antibodies (ANCA)
155 Pancreas antibody titer
162 Intrinsic Factor antibody
214 Gastric Parietal Cell antibody titer
181 **IBD Profile I** includes 003, 155
182 **IBD Profile II** includes 003, 100, 102, 108, 155
187 **Gastrointestinal Profile** includes 003, 100, 102, 164

Autoimmune Liver Diseases

- 001 ANA titer and pattern on HEp-2 & Mouse kidney
152 AMA mitochondrial antibody titer
153 ASMA smooth muscle antibody titer
154 AMA & ASMA antibody titer
155 Pancreas antibody titer
156 LKM (liver-Kidney microsomal) antibody titer
163 SP-100 antibody titer
165 LKM1 antibody (ELISA)
183 **Liver Profile I** includes 001, 154, 156
184 **Hepatitis Profile** includes 001, 153, 156
185 **PBC Profile** includes 001, 152, 163

Allergy

- 157 Milk IgE antibody
158 α -Lactalbumin IgE antibody
159 β -Lactoglobulin IgE antibody
160 Casein IgE antibody
403 Total Serum IgE (refer to allergy section for specific allergens)
186 **Milk Protein Profile** includes 157, 158, 159, 160, 403

NEUROIMMUNOLOGY

Neuropathies

- 449 Galactocerebroside antibody; IgG & IgM
450 GM1 antibody; IgG & IgM
451 GD1b antibody; IgG & IgM
452 GQ1b antibody; IgG & IgM
453 Asialo GM1 antibody; IgG & IgM
454 GD1a antibody; IgG & IgM
456 Nerve antibody; IgM
457 MAG antibody; IgM
455 **Neuropathy Profile** includes 450, 451, 452, 453

Neuropsychiatric Lupus

- 012 Ribosomal P antibody

Paraneoplastic Syndromes

- 500 Hu antibody titer
501 Yo antibody titer
502 Ri antibody titer
503 **Paraneoplastic Profile** includes 500, 501, 502
505 **Motor & Sensory Neuropathy P.** 450,451,453,454,456,500,502

Myasthenia Gravis

- 430 Skeletal muscle antibody titer

CARDIOLOGY

- 008 Phospholipid antibody; IgG, IgA & IgM
016 Oxidized LDL (oxLDL) antibody
431 Heart antibody titer
205 **Cardiac Profile** includes 008, 016, 431

INFERTILITY

- 008 Phospholipid antibody; IgG, IgA & IgM
490 Ovary antibody titer
491 Testes antibody titer
495 **Infertility Profile** includes 008, 490, 491

IMMUNOGLOBULIN/COMPLEMENT

- 400 IgG
401 IgA
402 IgM
403 IgE (refer to allergy section for specific allergens)
405 C3 a₁C/a₁A
406 C4

ALLERGY - Consult Specimen Requirements

- 403 Total Serum IgE
460 **Primary Screen** - 16 analytes - Total IgE **Trees:**maple, oak;
Weeds: short ragweed, giant ragweed, plantain, lambs's quarters
Grasses: june grass, timothy, orchard **Dust/Mite:** house dust (H-S),
D. farinae
Epithelia: dog, cat **Molds:**Alternaria tenius, Cladosporium herbarium
461 **Food Screen** - 15 analytes - Total IgE, barley, beef, chocolate,
corn, cow's milk, egg white, malt, oat, peanut, pork, potato, rye,
soybean, wheat
462 **Pediatric Screen** - 7 analytes - Total IgE, Alternaria tenius,
cat epithelium, dog epithelium, cow's milk, egg white, house dust
463 **Venom/Insect Screen** - 6 analytes - Total IgE, honey bee,
paperwasp, yellow hornet, yellow jacket, white faced hornet

SPECIFIC ALLERGENS:

- 480 One (1) Allergy Analyte (mark below)
481 Three (3) or more Allergy Analytes (mark below)

FOODS

- | | | |
|----------------------------------|-------------------------------------|-------------------------------------|
| <input type="checkbox"/> Barley | <input type="checkbox"/> Beef | <input type="checkbox"/> Chocolate |
| <input type="checkbox"/> Corn | <input type="checkbox"/> Cow's milk | <input type="checkbox"/> Egg white |
| <input type="checkbox"/> Gluten | <input type="checkbox"/> Malt | <input type="checkbox"/> Melon |
| <input type="checkbox"/> Oat | <input type="checkbox"/> Peanut | <input type="checkbox"/> Pork |
| <input type="checkbox"/> Potato | <input type="checkbox"/> Rye | <input type="checkbox"/> Strawberry |
| <input type="checkbox"/> Soybean | <input type="checkbox"/> Wheat | |

INSECT/VENOMS

- | | | |
|--|---|--|
| <input type="checkbox"/> Honey Bee | <input type="checkbox"/> Paper Wasp | <input type="checkbox"/> Yellow Hornet |
| <input type="checkbox"/> Yellow Jacket | <input type="checkbox"/> White Faced Hornet | |

HOUSE DUST/MITES

- House Dust (H-S) *D. Farinae*

EPIDERMALS

- Cat Epithelium Dog Epithelium

MOLDS

- Alteraria tenius* *Cladosporium herbarium*

TREES

- Maple (Box Elder) Oak Cottonwood

WEEDS

- | | | |
|--|--|--|
| <input type="checkbox"/> Lamb's Quarters | <input type="checkbox"/> Goldenrod | <input type="checkbox"/> Giant Ragweed |
| <input type="checkbox"/> Plantain | <input type="checkbox"/> Short Ragweed | |

GRASSES

- June Grass Orchard Sweet Vernal Timothy