



Department of Laboratory Medicine

Core Laboratory
Immunology Laboratory

Immunology Requisition

For outside Unity Health Toronto

2nd Floor, Glendale Wing
Room 2G-103
30 The Queensway
Toronto, ON M6R 1B5

Core Lab Specimen Receiving
Phone: 416-530-6273
Fax: 416-530-6559

Immunology Lab
Phone: 416-530-6486 Ext. 3138

Last Name ▶ _____

First Name ▶ _____

MRN ▶ _____ Gender ▶ Male Female

Birth Date (YYYY-MMM-DD) ▶ ____-____-____

Health Card # ▶ _____

Referring physician

Name ▶ _____, _____
Last Name First Name

CPSO # ▶ _____ Billing # ▶ _____

Phone ▶ ____-____-____ Fax ▶ ____-____-____

Referring institution

Name ▶ _____

Address ▶ _____

Phone ▶ ____-____-____ Fax ▶ ____-____-____

Clinical Information/Additional Comments

Specimen and Request Information (See page 2 for test details)

SERUM (Minimum 1.0 mL)

Collection (Please print legibly) ▶

____-____-____ : ____:____ Last Name First Name
YYYY-MMM-DD hh:mm

Your specimen # ▶ _____

Anti-nuclear/Anti-cellular antibody (ANA)

- Screen by ELISA method
- Patterns by indirect immunofluorescence (IIFA) method
- Extractable nuclear antigen (ENA)
- Anti-DFS70 antibody
- Anti-double stranded DNA (dsDNA) antibody
- Autoimmune Liver Disease profile
- Connective Tissue Disease/Lupus profile
- Sjögren's Syndrome profile
- Systemic Sclerosis (Scleroderma; nucleoli) profile

Celiac Disease

- IgG and IgA quantitation
- Anti-deamidated gliadin peptide (DGP) antibody IgA
- Anti-deamidated gliadin peptide (DGP) antibody IgG
- Anti-tissue transglutaminase (tTg) antibody IgA
- Anti-tissue transglutaminase (tTg) antibody IgG

Myositis

- Myositis antibodies
- Myositis antibodies with anti-Mup44 (cN-1A)
- Anti-HMG-CoA reductase (HMGR) antibody

Neuromyelitis Optica Spectrum Disorders

For new cases of NMO Spectrum Disorders, initial testing for both AQP4 and MOG antibodies is *strongly recommended*.

- Anti-aquaporin-4 (AQP4, NMO) antibody
- Anti-myelin oligodendrocyte glycoprotein (MOG) antibody

Other

- Alpha-2-macroglobulin (α2M)
- Anti-cyclic citrullinated peptide (CCP) antibody
- Anti-glomerular basement membrane (GBM) antibody

- Anti-mitochondrial antibody (AMA)
- Anti-smooth muscle antibody (ASM)
- Anti-parietal cell antibody (APCA)
- Anti-myeloperoxidase (MPO) antibody
- Anti-proteinase 3 (PR3) antibody
- Anti-neutrophil cytoplasmic antibodies (ANCA): pANCA, cANCA
- Beta-2-microglobulin (B2M)
- Serum free light chains (FLC)
- Serum protein electrophoresis (SPE)
- Immunofixation electrophoresis (IFE)

FLUID (Minimum 0.5 mL): CSF Other ▶ _____

Collection (Please print legibly) ▶

____-____-____ : ____:____ Last Name First Name
YYYY-MMM-DD hh:mm

Your specimen # ▶ _____

- Anti-aquaporin-4 antibody
- Anti-myelin oligodendrocyte glycoprotein antibody
- Anti-nuclear/Anti-cellular antibody: Patterns by IIFA method

URINE (Minimum 20 mL) ▶ First morning void 24h

Collection (Please print legibly) ▶

____-____-____ : ____:____ Last Name First Name
YYYY-MMM-DD hh:mm

Your specimen # ▶ _____

- Immunofixation electrophoresis, Urine (Bence Jones Protein)

SPECIMEN REQUIREMENTS

- **Urine:** Store at 4°C and send within a week of collection.
- **Other body fluids (e.g., CSF):** Minimum 0.5 mL in small sterile tube; store below -20°C and send frozen.
- **Serum:** Minimum 1.0 mL is required for SPE/IFE; store at 4°C and send within a week of collection. One aliquot of minimum 1.0 mL is sufficient for all other tests; store below -20°C and send frozen.

OTHER TEST REQUESTS

For inquiries regarding test requests that are not on this requisition, please contact Dr. Maria Pasic (Immunology Lab Director) at Maria.Pasic@unityhealth.to

INVOICING INQUIRIES

Please contact Aileen Mendoza, Laboratory Administrative Assistant at Aileen.Mendoza@unityhealth.to or 416-530-6267.

RESULTS

Report will be faxed to the fax number you provided on the requisition.

SPECIMEN TRANSPORT

- **Air freight:** Use overnight delivery. Samples should be frozen until shipment. Send with ice packs (dry ice is not necessary).

Test Details

Anti-nuclear/Anti-cellular antibody (ANA)

- **Screen by ELISA method**
Screens for antibodies against SS-A, SS-B, Sm, RNP/Sm, Scl-70, Jo-1, dsDNA, histones, ribosomal P proteins, and centromeres. Extractable nuclear antigen (ENA) will be performed if screen is positive.
Method: ELISA
Turn-around-time: 4 days
- **Patterns by indirect immunofluorescence (IIFA) method on serum and body fluids**
Method: IIFA using HEp20-10 cell line. Reported titre: 1:80, 1:160, 1:320, greater than 1:320.
Turn-around-time: 7 days
- **Extractable nuclear antigen (ENA)**
Includes antibodies against nRNP/Sm, Sm, SS-A, Ro-52, SS-B, Scl-70, PM-Scl100, Jo-1, CENP B, PCNA, dsDNA, nucleosomes, histones, ribosomal P-proteins, AMA-M2, DFS70.
Method: Immunoblot
Turn-around-time: 7 days
- **Anti-DFS70 antibody**
Method: Immunoblot
Turn-around-time: 7 days
- **Anti-double stranded DNA (dsDNA) antibody IgG**
Method: ELISA
Turn-around-time: 4 days
- **Autoimmune Liver Diseases profile**
Includes antibodies against AMA-M2, M2-3E (BPO), Sp100, PML, gp210, LKM-1, LC-1, SLA/LP, SS-A, Ro-52, Scl-70, CENP A, CENP B, PGDH. To support the diagnosis of primary biliary liver cirrhosis, increase in transaminases for unclear reasons, suspected autoimmune hepatitis and overlap syndromes.
Method: Immunoblot
Turn-around-time: 7 days
- **Connective Tissue Disease/Lupus profile**
Includes antibodies against Mi-2 β , Ku, nRNP/Sm, Sm, SS-A, Ro-52, SS-B, Scl-70, PM-Scl100, Jo-1, CENP B, PCNA, dsDNA, nucleosomes, histones, ribosomal P-proteins, AMA-M2. To support the diagnosis of Sharp syndrome, lupus, Sjögren's syndrome, progressive systemic sclerosis, polymyositis/ dermatomyositis, overlap syndromes, CREST syndrome and primary biliary cholangitis.
Method: Immunoblot
Turn-around-time: 7 days
- **Sjögren's Syndrome profile**
Includes antibodies against SS-A, SS-B, Ro-52.
Method: Immunoblot
Turn-around-time: 7 days
- **Systemic Sclerosis (Scleroderma; nucleoli) profile**
Includes antibodies against Scl-70, CENP A, CENP B, RP11, RP155, Fibrillarin, NOR90, Th/To, PM-Scl100, PM-Scl75, Ku, PDGFR, Ro-52. To support the diagnosis of progressive systemic sclerosis (diffuse and limited form) and overlap syndromes.
Method: Immunoblot
Turn-around-time: 7 days

Celiac Disease

- IgG and IgA quantitation
Method: Turbidimetric
Turn-around-time: 1 day
- Anti-deamidated gliadin peptide (DGP) antibody IgA
Method: ELISA
Turn-around-time: 7 days
- Anti-deamidated gliadin peptide (DGP) antibody IgG
Method: ELISA
Turn-around-time: 7 days
- Anti-tissue transglutaminase (tTg) antibody IgA
Method: ELISA
Turn-around-time: 7 days
- Anti-tissue transglutaminase (tTg) antibody IgG
Method: ELISA
Turn-around-time: 7 days

Myositis Panel

- **Myositis antibodies**
Includes antibodies against Mi-2 alpha, Mi-2 beta, TIF1g, MDA5, NXP2, SAE1, Ku, PM-Scl100, PM-Scl75, Jo-1, SRP, PL-7, PL-12, EJ, OJ, Ro-52. To support the diagnosis of dermatomyositis/ polymyositis, idiopathic myositis, antisynthetase syndrome and overlap syndromes.
Method: Immunoblot
Turn-around-time: 7 days
- **Anti-Mup44 (cN-1A) antibody (Inclusion body myositis)**
Method: Immunoblot
Turn-around-time: 7 days
- **Anti-HMG-CoA reductase (HMGCR) antibody IgG (Immune mediated necrotizing myopathy)**
Method: ELISA
Turn-around-time: 14 days

Neuromyelitis Optica Spectrum Disorders

- **Anti-aquaporin-4 (AQP4, NMO) antibody**
Method: IIFA using AQP-4 transfected HEK cells as substrate. Dilution at 1:100. Neat for CSF.
Turn-around-time: 7 days
- **Anti-myelin oligodendrocyte glycoprotein (MOG) antibody**
Method: IIFA using MOG-transfected HEK cells as substrate. Dilution at 1:100. Neat for CSF.
Turn-around-time: 7 days

Other

- **Alpha-2-macroglobulin (α 2M)**
Method: Turbidimetric
Turn-around-time: 3 days
- **Anti-cyclic citrullinated peptide (CCP) antibody IgG**
Method: ELISA
Turn-around-time: 7 days
- **Anti-glomerular basement membrane (GBM) antibody IgG**
Method: ELISA
Turn-around-time: 7 days

- **Anti-mitochondrial antibody (AMA), Anti-smooth muscle antibody (ASM), Anti-parietal cell antibody (APCA)**
Method: IIFA using rat stomach/kidney as substrate. Dilution at 1:100.
Turn-around-time: 7 days
- **Anti-myeloperoxidase (MPO) antibody IgG, Anti-proteinase 3 (PR3) antibody IgG**
Method: ELISA
Turn-around-time: 4 days
- **Antineutrophil cytoplasmic antibodies (ANCA) pANCA, cANCA and Atypical patterns are reported.**
Method: IIFA using human neutrophils as substrate
Turn-around-time: 7 days
- **Beta-2-microglobulin (B2M)**
Method: Turbidimetric
Turn-around-time: 3 days
- **Serum free light chains (FLC)**
Includes free kappa, free lambda and free kappa/free lambda ratio
Method: Turbidimetric
Turn-around-time: 3 days
- **Serum Protein Electrophoresis (SPE)**
If an abnormality is detected, gel immunofixation electrophoresis will be performed every 5 years unless there are changes in electrophoresis pattern. Hypogammaglobulinemia and polyclonal gammaglobulinemia will be confirmed by gel immunofixation electrophoresis at initial identification.
Method: Capillary electrophoresis
Turn-around-time: 3 days
- **Immunofixation electrophoresis (IFE)**
Includes identification of monoclonal IgG, IgA, IgM, Kappa and Lambda bands and quantitation. IgE, IgD, Free Kappa and Free Lambda will be tested if warranted. Hypogammaglobulinemia and polyclonal gammaglobulinemia will be confirmed on first detection.
Method: Gel immunofixation electrophoresis
Turn-around-time: 7 days
- **Immunofixation electrophoresis, Urine (Bence Jones Protein)**
Includes free kappa and free lambda quantitation. 24h urine collection preferred. Testing will not be done if urine protein is less than 0.03 g/L.
Method: Gel immunofixation electrophoresis
Turn-around-time: 7 days