

*****MitogenDx does NOT book or accept appointments for sample collection / venipuncture. Southern Alberta - contact TapLabs (taplabs.ca). All other locations, contact your local laboratory.**

*****Complete Customer Information and Laboratory Information are REQUIRED for samples to be processed. Completion of this form indicates your consent to have test results sent to the email listed under "Customer Information". See Pages 2, 3, and 4 for a list of Diagnostic Tests. Please mark ALL tests to be done.**

CUSTOMER INFORMATION

Customer Name (Surname, First name)

Surname

First Name

Email

Sex Female Male

Personal Health Number

Date of Birth (dd/mm/yy)

LABORATORY INFORMATION

Laboratory Name

Phone Number

Fax Number

Email address

Comments

PAYMENT & RECEIVING RESULTS

You will be contacted directly by MitogenDx for payment when your sample is received.

Results typically follow within 10 working days after receipt of sample AND payment. Results will be sent to the customer email above.

SAMPLE INFORMATION

Sample Type Serum Plasma CSF

Time and Date Collected (dd/mm/yy)

Reason for Testing / Comments

Sample Attestation

I attest that the sample was prepared in accordance with the sample collection procedure below

SAMPLE COLLECTION

Cytokine/IL-6 Sample Collection Procedure:

1. Collect blood in a plasma EDTA tube (Purple Vacutainer) or in a serum collection tube (Gold (SST) or Red Vacutainer). Please do not use heparinized tubes for sample collection.
2. Within 30 minutes from collection, centrifuge at 1000 x g for 10 minutes at 4°C. Immediately transfer/aliquot 0.3 - 1.0 mL cell-free plasma or serum to a small tube (~3mL or smaller tube such as a false-bottom tube).
3. Freeze the sample ($\leq -20^{\circ}\text{C}$) and ship on dry ice (consider including a temperature monitoring device in the shipment).

Complement (page 3) Sample Collection Procedure:

1. Serum samples (0.5 - 1.0 mL) obtained from blood collected in a Serum Separator Tube (SST) are preferred. For plasma samples (0.5 - 1.0 mL), plasma EDTA is preferred.
2. Please send serum (separated from clot) and EDTA-plasma (separated from cells) frozen on dry ice.

General (page 4) Sample Collection Procedure:

1. Collect blood in a plasma EDTA tube (Purple Vacutainer) or in a serum collection tube (Gold (SST) or Red Vacutainer). Please do not use heparinized tubes for sample collection.
2. Within 30 minutes from collection, centrifuge at 1000 x g for 10 minutes at 4°C. Immediately transfer/aliquot 0.3 - 1 mL cell-free plasma or serum to a small tube (~3mL or smaller tube such as a false-bottom tube).
3. Freeze the sample ($\leq -20^{\circ}\text{C}$) and ship on dry ice (consider including a temperature monitoring device in the shipment).

SENDING SAMPLES & SHIPPING

Sending Samples: Please ensure your samples are scheduled to arrive before 3pm on Friday. Please do not send samples on weekends or holidays as MitogenDx will be closed and SAMPLES WILL NOT BE RECEIVED UNTIL THE FOLLOWING WEEK.

Shipments from any shipping company are accepted (including Purolator and FedEx). Tracking numbers should be retained for delivery confirmation. If problems arise or your package is not delivered promptly please contact your shipping company.

Shipping: See Shipping Instructions. Please send properly labeled and packaged samples with this requisition to the address below.

CONTACT INFO

MitogenDx Laboratory

3415C 3rd Ave NW
 Calgary, AB, T2N 0M4

Phone: 403-800-8851 Fax: 403-800-8852

Email: lab@mitogendx.com

Visit our website: www.mitogendx.com

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Testing is performed by our affiliate laboratory, Eve Technologies. Eve Technologies is certified by Centers for Medicare & Medicaid Services (CMS) as a High Complexity International Laboratory under the Clinical Laboratory Improvement Amendments (CLIA); specialty Diagnostic Immunology, subspecialty General Immunology. These are Laboratory Developed Tests (LDT) and do not appear on the lists of tests in the Federal Register and have not been reviewed by the U.S. Food and Drug Administration.

IMMUNE BIOMARKER TEST REQUISITION

Medical Personnel: Please mark ALL tests to be done

Cytokine, Chemokine, Growth Factor 71-Plex Clinical: 6Ckine, BCA-1, CTACK, EGF, ENA-78, Eotaxin, Eotaxin-2, Eotaxin-3, FGF-2, Flt-3 Ligand, Fractalkine, G-CSF, GM-CSF, GRO α , I-309, IFN α 2, IFN γ , IL-1 α , IL-1 β , IL-1RA, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-12(p40), IL-12(p70), IL-13, IL-15, IL-16, IL-17A, IL-17E/IL-25, IL-17F, IL-18, IL-20, IL-21, IL-22, IL-23, IL-27, IL-29A, IL-33, IP-10, LIF, MCP-1, MCP-2, MCP-3, MCP-4, M-CSF, MDC, MIG, MIP-1 α , MIP-1 β , MIP-1 δ , PDGF-AA, PDGF-AB/BB, RANTES, sCD40L, SCF, SDF-1 α + β , TARC, TGF α , TNF α , TNF β , TPO, TRAIL, TSLP, VEGF-A

Indications: Use this test when identifying relevant therapy targets, mechanism of disease is unknown, arthritis, macrophage activation syndrome (MAS), Hemophagocytic lymphohistiocytosis (HLH), sepsis / toxic shock, necrotizing fasciitis, admitted meningitis, admitted pneumonia, Kawasaki syndrome, prolonged or periodic fever, severe or chronic inflammation, organ dysfunction. Also useful in investigation of 'cytokine storm' seen in HLH and related conditions.

Reference Intervals available for PLASMA-EDTA samples, SERUM, and CSF samples
Results presented with cytokine groupings (immune signatures)

Focused Cytokine, Chemokine, Growth Factor 15-Plex Clinical: GM-CSF, IFN γ , IL-1 β , IL-1RA, IL-2, IL-4, IL-5, IL-6, IL-8, IL-10, IL-12(p40), IL-12(p70), IL-13, MCP-1, TNF- α

Indications: Use this test when identifying relevant therapy targets in severe or chronic inflammation, and 'cytokine storm' seen in COVID-19.
Reference Intervals available for PLASMA-EDTA samples, SERUM, and CSF samples

Soluble Cytokine Receptor 14-Plex: sCD30, sEGFR, sgp130, sIL-1RI, sIL-1RII, sIL-2R α , sIL-4R, sIL-6R, sRAGE, sTNF RI, sTNF RII, sVEGF R1, sVEGF R2, sVEGF R3

Indications: Use this test when identifying relevant therapy targets, mechanism of disease is unknown, arthritis, macrophage activation syndrome (MAS), Hemophagocytic lymphohistiocytosis (HLH), sepsis / toxic shock, necrotizing fasciitis, admitted meningitis, admitted pneumonia, Kawasaki syndrome, prolonged or periodic fever, severe or chronic inflammation, organ dysfunction.

Reference Intervals available for PLASMA-EDTA samples and CSF samples

Serum Amyloid A (SAA) / ADAMTS13 Panel (2 Plex)

Indications: Use this test for acute phase inflammatory detection, chronic inflammatory diseases.

Reference Intervals available for PLASMA-EDTA samples and CSF (SAA only) samples

Complement Profile Panel (13-Plex): Adipsin (Factor D), C1q, C2, C3, C3b/iC3b, C4, C5, C5a, Factor B, Factor H, Factor I, Mannose Binding Lectin (MBL)

Indications: Use this test for acute phase inflammatory detection.

Reference Intervals available for PLASMA-EDTA samples.

*This test has not been assessed under CLIA.

Interferon Panel (9-Plex): IFN α 2, IFN β , IFN γ , IFN γ R1, IFN ϵ , IFN λ 1, IFN λ 2, IFN λ 3, IFN ω

Indications: Use this test to assess the interferon response in viral infections, autoinflammatory interferopathies, and autoimmune diseases.

Reference Intervals available for PLASMA-EDTA samples and SERUM samples.

Angiogenesis Panel (12-Plex): Angiopoietin-2, BMP-9, Endoglin, Endothelin-1, FGF-1, Follistatin, HB-EGF, HGF, Leptin, PLGF, VEGF-C, VEGF-D

Indications: Use this test to assess abnormalities of angiogenesis in cancer, autoimmune diseases, cardiovascular disease, or other chronic inflammatory conditions.

Reference Intervals available for PLASMA-EDTA samples.

COMMENTS

LONG COVID-19 BIOMARKER TEST REQUISITION

Long COVID Angiogenesis & Cardiovascular Biomarker Panel (18-Plex) (LDT): ADAMTS13, Angiopoietin-2, BMP-9, D-Dimer, Endoglin, Endothelin-1, FGF-1, Follistatin, HB-EGF, HGF, Leptin, PLGF, SAA, sICAM-1, sP-Selectin, sVCAM-1, VEGF-C, VEGF-D

Indications: Use this panel to investigate dysfunctions in vascular and endothelial integrity, coagulation, and inflammation. The panel consists of circulating factors that may suggest abnormalities in angiogenesis (a response to persistent vascular injury), coagulation, vascular function and inflammatory responses, which are thought to be key features of long COVID pathogenesis.

Reference Intervals available for PLASMA-EDTA samples.

SAA / Cardiovascular Disease Panel (6-Plex) (LDT): ADAMTS13, D-Dimer, SAA, sICAM-1, sP-Selectin, sVCAM-1

Indications: Use this test to investigate the underlying molecular basis of suspected coagulopathies, cardiovascular disease, and acute or chronic inflammation.

Reference Intervals available for PLASMA-EDTA samples.

* Plasma EDTA
preferred

COMMENTS

Patient Name

Personal Health Number

COMPLEMENT TEST REQUISITION

Complement Panel 1 (LDT): AH50 (serum only), CH50 (serum only), MBL (serum only), sC5b-9 (serum or plasma)

Complement Panel 2: 16-Plex Clinical (LDT): Adipsin, Complement C1q, Complement C2, Complement C3, Complement C3a, Complement C3b/iC3b, Complement C4, Complement C4b, Complement C5, Complement C5a, Complement C9, Factor B, Factor H, Factor I, Mannose-Binding Lectin (MBL), Properdin

Complement Panel 3 (LDT): C1q autoantibodies, Factor H autoantibodies

Complement Panel 4 (LDT): C1 INH protein, C1 INH functional assay

COMMENTS

GENERAL, LUPUS & SJOGRENS SYNDROME

Advanced ANA – Anti-Cellular Antibodies (includes interpretation of HEp-2 Atypical Nuclear, Cytoplasmic and Cell Cycle ICAP Patterns)

Systemic Lupus Erythematosus Panel

Anti-Sm, U1RNP, Ro52/TRIM21, SSA/Ro60, SSB/La, PCNA, dsDNA, Ku, Ribosomal-P, Chromatin

Anti-dsDNA by Chemiluminescence Immunoassay (CIA)

Anti-Double Stranded DNA / dsDNA (IgG)

Anti-Single-Stranded DNA

Anti-Single Stranded DNA / ssDNA (IgG)

Anti-Histone (Drug-Induced Lupus, Systemic Rheumatic Diseases)

Anti-Histone (IgG)

Anti-DFS70 (Dense Fine Speckled70/ LEDGF)

Anti-Dense Fine Speckled70 (anti-DFS70) / LEDGF

Sjögren Syndrome/Disease Panel

Anti-SSA/Ro60, SSB/La, Ro52/TRIM21

Anti-Nuclear Envelope/Membrane Test Panel (LDT) Anti-TPR, gp210,

Lamin B

Cytoplasmic Dot Panel (LDT)

Anti-GW182, GE-1, Ago2, Early Endosome Antigen 1 (EEA-1)

SCLERODERMA & SKIN

Scleroderma / Systemic Sclerosis Panel

Anti-CENP A + B, Topo-I/Scl-70, Anti-RNA polymerase III, fibrillarin/U3RNP, Th/To/hPOP1, Ku, PDGFR, Ro52/TRIM21, PM/Scl-75, PM/Scl-100, NOR90/Hubf

Bullous & Autoimmune Skin Disease Panel

Anti-BP180, BP230, Desmoglein-1, Desmoglein-3

Nucleolar Autoantibody Panel

Anti-RNA polymerase III, fibrillarin/U3RNP, Th/To, Ku, PM/Scl-75, PM/Scl-100, NOR90/Hubf

ARTHRITIS

Arthritis Panel Anti-Citrullinated peptide 3 (CCP-3), Calprotectin/S100A8

MUSCLE & MYOPATHY

Autoimmune Myopathy / Myositis Panel PLUS

Anti-Jo-1, Mi2- α , Mi2- β , MDA5, NXP2, TIF1 γ , PL7, PL12, PM/Scl75, PM/Scl100, Ku, SRP, E γ , O γ , Ro52/TRIM21, SAE1, HMGC α , NT5C1A/Mup44

Anti-SMN Complex

SMN1, Gemin 3, P80, RuvBL1, RuvBL2 (LDT)

Anti-Acetylcholine Receptor (AChR) / Myasthenia Gravis

Anti-Acetylcholine Receptor (AChR)

ANTIPHOSPHOLIPID SYNDROME

Anti-Domain 1 Beta-2 Glycoprotein 1 (D1 β 2GP1) (IgG only)

Anti-Cardiolipin (IgG + IgM)

Anti-Phosphatidylserine / Prothrombin Complex (PS/PT) (IgG + IgM)

NEPHRITIS & IBD

Anti-PLA2R

Anti-phospholipase A2 receptor (PLA2R) Cell Based Assay

Anti-phospholipase A2 receptor (Q-PLA2R) Quantitative ELISA (for more precise quantitation and follow-up)

Anti-THSD7A (thrombospondin)

Anti-thrombospondin type-1 domain-containing protein 7A (THSD7A)

Uromodulin

Uromodulin

ASCA (IgG + IgA) Inflammatory Bowel Disease

Anti-Saccharomyces cerevisiae (ASCA IgG/IgA)

LIVER

Autoimmune Liver Disease Panel PLUS (serum only)

Anti-AMA-M2, M2-3EBPO, LKM, SLA, SP100, gp210, PML, LC-1, Ro52/TRIM21, SSA/Ro60, Topo-I / Scl-70, Centromere A (CENP A), Centromere B (CENP B), PDH

LUNG

Interstitial Lung Disease (ILD) Antibody Panel

Anti-CENP A+B, Topo-I/Scl-70, Anti-RNA polymerase III, fibrillarin, Th/To/hPOP1, Ku, PDGFR, Ro52/TRIM21, PM/Scl-75, PM/Scl-100, Nor90/Hubf, Jo-1, Mi2- α , Mi2 β , MDA5, NXP2, TIF1 γ , PL7, PL12, Ku, SRP, E γ , O γ

Krebs von den Lungen (KL-6) (LDT)

Alveolar Proteinosis (Anti-GMCSF) (LDT)

Anti-Granulocyte-macrophage colony-stimulating factor (GM-CSF)

ENCEPHALITIS

Anti-NMDA (NR1) Receptor

Anti-glutamate receptor (type NMDA)

Anti-DPPX (dipeptidyl aminopeptidase-like 6)

Anti-Dipeptidyl aminopeptidase-like protein 6

Anti-VGKC (Voltage gated potassium channel), LGI1 & CASPR2

Anti-Contactin-associated protein 2 (CASPR2) & Anti-Leucine-rich glioma-inactivated protein 1 (LGI1)

Anti-GABA β Receptor

Anti- γ -amino-butyric acid Receptor (GABA β)

Anti-AMPA Receptor

Anti-glutamate receptor (type AMPA1/2)

NEURO

Neurological Disease Test Panel (IgG +IgM) (Serum only)

Anti-GM1, GM2, GM3, GD1a, GD1b, GT1b, GQ1b

Neuromyelitis Optica Spectrum Disorder (NMOSD) (Anti-Aquaporin 4 & MOG)

Anti-Aquaporin 4 (AQP4 / NMO), Anti-Myelin Oligodendrocyte Glycoproteins (MOG)

Anti-Myelin Associated Glycoproteins (MAG) (Serum only)

Anti-GAD 65 (Glutamic Acid Decarboxylase)

High-Sensitivity Neurofilament (heavy chain) (LDT) (pNF-H)

High-Sensitivity Neurofilament (light chain) (LDT) (pNF-L)

Idiopathic Ataxia/ Peripheral Neuropathy Anti-MPP-1 (LDT)

Anti-M Phase Phosphoprotein 1/KIF20B

VASCULITIS

ANCA (PR3, MPO by BioFlash)

Anti-neutrophil cytoplasmic antibody (ANCA): perinuclear ANCA (MPO), cytoplasmic ANCA (PR3)

Atypical ANCA: Anti-Lysosome Associated Membrane Protein 2 (LAMP2), Anti-Elastase (LDT)

CANCER

Cancer-Associated Autoantibody Panel (LDT)

Anti-CENP-F1, Anti-CENP-F4, Anti-p53

Paraneoplastic Disease Panel PLUS

Anti-Amphiphysin, Ri (NOVA-1), Yo, Hu, PNMA2 (Ma2/Ta), CV2.1, Recoverin, SOX1, Titin, Zic4, GAD65, Tr (DNER)

SPECIALIZED/OTHER

Sleep Disorder (anti-IgLN5)

Anti-immunoglobulin-like cell adhesion molecule 5 (IgLN5)

Anti C1q

C1q autoantibodies

COMMENTS