

# Biomarker Laboratory Testing Services

**Supporting Clinical Trials**

**Biomarker Menu - Alphabetical**

*Assays are validated following CAP/CLIA regulations and bioanalytical compliance when applicable.  
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compliance and data integrity.*



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## A

1,5 Anhydroglucitol (Glycomark™)  
 3-BH (Beta 3-hydroxybutyrate)  
 $\alpha$ -1-Microglobulin (Alpha-1-Microglobulin)  
 $\alpha$ -GST (Alpha Glutathione S-Transferase)  
 ACTH (Adrenocorticotrophic Hormone)\*  
 Adiponectin, HMW (High Molecular Weight)  
 Adiponectin, Total  
 Adipsin (Complement Factor D)  
 ADMA (Asymmetric Dimethylarginine)  
 Albumin, Serum  
 Amylase  
 Ang-2 (Angiotensin-2)  
 Anti-CCP (Anti-Cyclic Citrullinated Peptide)  
 Anti-PTH (1-34) (Anti-Parathyroid Hormone)  
 Anti-PTHrp (1-34) (Anti-Parathyroid Homone Related Protein)  
 Apolipoprotein A-I, Serum†, Urine  
 Apolipoprotein A-II  
 Apolipoprotein B, Total†  
 Apolipoprotein B-100  
 Apolipoprotein B-48  
 Apolipoprotein C-I  
 Apolipoprotein C-II  
 Apolipoprotein C-III  
 Apolipoprotein E  
 Apolipoprotein J (Clusterin), Urine  
 APRIL (A Proliferation-inducing Ligand)  
 Ascorbic Acid (Vitamin C)\*

## B

$\beta$ 2M (Beta-2-Microglobulin), Serum, Urine  
 BAFF (B-cell Activating Factor)  
 BAP (Bone Alkaline Phosphatase)  
 BCA-1 (CXCL-13) (B Cell-attracting Chemokine)  
 BCMA (B-cell Maturation Antigen)  
 Bile Acids, Total  
 BMP-9 (Bone Morphogenic Protein-9) (sCD105)  
 BUN (Blood Urea Nitrogen)

## C

c-Met (aka Hepatic Growth Factor Receptor: HGFR)  
 C-Peptide (C-Peptide of Insulin)  
 C1C2 (C1C2 Neopeptide)\*  
 C1Q Complement Complex  
 C2C (Collagen Type II Cleavage), Serum, Urine\*  
 CA-3 (Cancer Antigen 3)  
 CA-IX (Carbonic Anhydrase-IX) (CA-9)  
 CA 125 (Cancer Antigen 125)\*  
 CA 15-3 (Cancer Antigen 15-3)\*  
 CA 19-9 (Cancer Antigen 19-9)  
 Calcitonin\*  
 Calcium, Serum, Urine  
 Calprotectin\* (S100A8/S100A9) (MRP8/14)  
 CCK (Cholecystokinin)  
 CEA (Cancer Embryonic Antigen)\*  
 CETP Activity (Cholesteryl Ester Transfer Protein)  
 CETP Mass (Cholesteryl Ester Transfer Protein)  
 Cholesterol, Esterified  
 Cholesterol, Free  
 Cholesterol, Total†  
 Cholesterol Efflux††

Chylomicrons, Total (B-48)  
 Chylomicron – Component Apolipoprotein B  
 Chylomicron – Component Cholesterol  
 Chylomicron – Component Triglycerides  
 C1CP (C-Propeptide of Type I Procollagen) (PICP)  
 CK-18/M30 Fragment Asp 396  
 CK-18/M65 (Cytokeratin 18/M65)  
 Clusterin, Urine  
 COMP (Cartilage Oligomeric Matrix Protein)  
 Complement Factor C3c (C-Factor C3c)  
 Complement Factor C4 (C-Factor C4)  
 Cortisol  
 Creatinine, Serum, Urine  
 CRP- HS (C-Reactive Protein, Highly Sensitive)  
 CS-846 (Aggrecan)\*  
 CTGF (Connective Tissue Growth Factor), Serum  
 CTX-I (C-Terminal Telopeptides of Type I Collagen), Serum, Urine  
 CTX-II (C-Terminal Telopeptides of Type II Collagen), Serum\*, Urine  
 Cystatin C, Serum, Urine

## D

D-Dimer, Sensitive  
 DHEA-S (Dehydroepiandrosterone Sulfate)  
 DKK-1 (Dickkopf-related Protein-1)  
 DPD Free (Deoxyypyridinoline), Urine  
 DPD Total (Deoxyypyridinoline), Serum, Urine  
 DPP-IV Activity (Dipeptidyl Peptidase-4)

## E

E-Selectin  
 Endoglin  
 Endothelin-1\*  
 Eotaxin  
 Eotaxin-3  
 EPO (Erythropoietin)  
 Estradiol

## F

Fas (APO-1) (CD95)  
 FDP (Fibrinogen Degradation Products)\*  
 Ferritin  
 FGF-19 (Fibroblast Growth Factor 19)  
 FGF-21 (Fibroblast Growth Factor 21)\*  
 Fibrinogen  
 Folate  
 Free Fatty Acids (FFA) (NEFA)  
 Fructosamine  
 FSH (Follicle Stimulating Hormone)\*

## G

Galectin-3  
 GDF-15 (Growth Differentiation Factor-15)\*  
 Ghrelin, Acylated  
 Ghrelin, Total  
 GIP, Total (Gastric Inhibitory Polypeptide)  
 GLDH (Glutamate Dehydrogenase)\*  
 GLP-1, Active (Glucagon-like Peptide-1)  
 GLP-1, Total (Glucagon-like Peptide-1)  
 GLP-2 (Glucagon-like Peptide-2)

Glucagon  
 Glucose, Plasma, Serum, Urine  
 Glycated Albumin (GA)  
 Glycerol, Free

## H

HA (Hyaluronic Acid)  
 Haptoglobin  
 HbA1c (Hemoglobin A1c)  
 HDL A-I: All Particles\*  
 HDL – Apolipoproteins A I  
 HDL – Apolipoproteins A II  
 HDL – Apolipoproteins C II  
 HDL – Apolipoproteins C III  
 HDL – Apolipoproteins E  
 HDL – Phospholipids  
 HDL – Triglycerides  
 HDL-C (Cholesterol)†  
 HDL-C Direct (Homogeneous)  
 HDL-C Precipitation by Polyethylene Glycol (PEG)  
 HDL-C Precipitation Heparin/Manganese  
 HDL-C Precipitation, Dextran Sulfate/ Magnesium (DS/Mg)  
 HDL-C Subclasses by Precipitation (HDL2/HDL3)  
 HDL-C Ultracentrifugation  
 HDL-SAA (HDL Serum Amyloid A)  
 HE-4 (Human Epididymis Protein 4)  
 Hepatic Lipase Activity\*  
 HGF (Hepatocyte Growth Factor)  
 HGH (Human Growth Hormone)  
 HMGB-1 (High Mobility Group Box-1 Protein)  
 Homocysteine, Total\*  
 HSP72 (Heat Sensitive Protein 72)\*

## I

I-CAM (Intracellular Adhesion Molecule-1)  
 I-CAM-1/V-CAM-1 Multiplex  
 ICTP (CTX-MMP) (C-terminal Telopeptide of Type I Collagen)  
 IFN $\alpha$  (Interferon alpha)\*  
 IFN $\beta$  (Interferon beta)\*  
 IFN $\gamma$  (Interferon gamma)  
 IGF-1 (Insulin-like Growth Factor-1)  
 IGFB-3 (Insulin-like Growth Factor Binding Protein-3)  
 IL-1 $\beta$  (Interleukin-1 beta)  
 IL-1 $\beta$  / IL Ra ratio  
 IL-1 Ra (Interleukin 1 Receptor Antagonist)  
 IL-1 R $\alpha$  (Interleukin-1 Receptor alpha)\*  
 IL-1R-ST2 (Interleukin-1 Receptor ST2)  
 IL-2 R $\alpha$  (Interleukin-2 Soluble Receptor alpha)  
 IL-4 (Interleukin-4)  
 IL-6 (Interleukin-6)  
 IL-6 HS (Interleukin 6, High Sensitive)  
 IL-6 sR (Interleukin 6 Soluble Receptor)  
 IL-6 Ultrasensitive (Interleukin 6,Ultrasensitive)  
 IL-8 (Interleukin-8)  
 IL-8, HA (Interleukin-8, High Abundance)  
 IL-10 (Interleukin-10)  
 IL-12p70 (Interleukin-12p70)  
 IL-17 (Interleukin-17)  
 IL-17A (Interleukin-17A)  
 IL-17A/F Heterodimer (Interleukin-17A/F)  
 IL-17F (Interleukin-17F)  
 IL-18 (Interleukin-18), Serum, Urine

Insulin  
IP-10 (IFN- $\gamma$  Induced Protein 10) (CXCL-10)  
iPTH (Intact Parathyroid Hormone - 2nd Generation)  
ITAC (Interferon-inducible T-cell Chemoattractant) (CXCL-11)

## K

KIM-1 (Kidney Injury Molecule-1), Urine  
KL-6 (Krebs von den Lungen-6)

## L

Lactate\*  
LCAT Activity (Lecithin-Cholesterol Acyltransferase)  
LCAT Mass (Lecithin-Cholesterol Acyltransferase)  
LDL – Apolipoprotein B  
LDL – Triglycerides  
LDL-C (Cholesterol)<sup>†</sup>  
LDL-C Direct (Homogeneous)  
LDL-C Friedewald Equation  
LDL-C Ultracentrifugation ( $\beta$ -Quantification)  
Leptin  
LH (Luteinizing Hormone)  
Lipase  
Lipid Profile with  $\beta$ -Quantification  
Lipoprotein (a) [Lp(a)]  
Lipoprotein CIII:B and CIII:Non-B Particles\*  
Lipoprotein Lipase Activity (LPL)  
Lipoprotein Subclasses by NMR<sup>††</sup>  
Lp-PLA2 Activity (Lipoprotein-associated Phospholipase A2)  
Lp-PLA2 Mass (Lipoprotein-associated Phospholipase A2)

## M

M-CSF (Macrophage Colony Stimulating Factor) (CSF-1)  
Mac2BP (Mac 2 Binding Protein)\*  
MCP-1 (Monocyte Chemotactic Protein-1) (CCL2)  
MCP-4 (Monocyte Chemotactic Protein-4) (CCL13)  
MDA (Malondialdehyde)  
MDC (Monocyte Derived Cytokine)  
Microalbumin (Urine Albumin)  
MIG (Monokine Induced  $\gamma$  Interferon)  
MIP-1 $\alpha$  (Macrophage Inflammatory Protein-1 alpha) (CCL26)  
MIP-1 $\beta$  (Macrophage Inflammatory Protein-1 beta) (CCL4)  
MIP-3 $\beta$  (Macrophage Inflammatory Protein-3 beta) (CCL19)  
MMP-1 (Matrix Metalloproteinase-1)  
MMP-2 (Matrix Metalloproteinase-2)\*  
MMP-3 (Matrix Metalloproteinase-3)  
MMP-7 (Matrix Metalloproteinase-7)  
MMP-8 (Matrix Metalloproteinase-8)\*  
MMP-9 (Matrix Metalloproteinase-9)  
MPO (Myeloperoxidase)  
Myoglobin\*  
Myostatin\*

## N

NAG (N-acetyl- $\beta$ -D Glucosaminidase), Urine

Neopterin\*  
NGAL (Neutrophil Gelatinase-associated Lipocalin), Plasma\*, Urine  
NT-ProBNP (N-Terminal Pro B-type Natriuretic Peptide)  
NTX (N-Telopeptides of Type I Collagen), Serum, Urine

## O

OC (Osteocalcin)  
OPG (Osteoprotegerin)  
OPN (Osteopontin), Plasma, Urine  
Osteoactivin\*  
Oxidized LDL (Oxidized Low Density Lipoprotein)  
Oxyntomodulin

## P

P-Selectin  
PAI-1 (Plasminogen Activator Inhibitor-1)  
PAP (Plasmin-alpha2-antiplasmin Complex)  
Paraoxonase-1 Activity (PON-1 Activity)  
Paraoxonase-1 Mass (PON-1 Mass)\*  
PARC (Pulmonary and Activation-Regulated Cytokine) (CCL-18) (MIP-4)  
PCSK-9 (Proprotein Convertase Subtilisin Kexin Type 9)  
Phospholipids, Total  
Phosphorus, Inorganic  
PIGF (Placental Growth Factor)  
PINP (N-Terminal Propeptide of Type I Collagen)  
PIIINP (N-Terminal Propeptide of Type III Collagen)  
PMN Elastase  
Pre- $\beta$ 1 HDL  
Procalcitonin  
Progesterone\*  
Proinsulin\*  
Prolactin\*  
PYD, Total (Pyridinoline)  
PYY, 3-36 (Peptide YY, 3-36)  
PYY, Total (Peptide YY, Total)

## R

RANK-L (Receptor Activator for Nuclear Factor B Ligand)  
RBP-4 (Retinol Binding Protein 4), Serum\*, Urine  
Remnant Lipoprotein – Apolipoprotein B (RLP-ApoB)  
Remnant Lipoprotein – Apolipoprotein B-48 (RLP-ApoB48)  
Remnant Lipoprotein – Cholesterol (RLP-C)  
Remnant Lipoprotein – Triglycerides (RLP-TG)  
Resistin  
Rheumatoid Factor Isotypes (IgA, IgG & IgM)

## S

S100A12 (S100 Calcium Binding A12)\*  
SAA (Serum Amyloid A)  
SC5b-9 (Serum Complement Membrane Attack Complex)  
Sclerostin (SOST)  
SDF-1  $\alpha$  (Stromal Cell Derived Factor-1 alpha) (CXCL-12)  
sdLDL (small, dense LDL)  
sgp130 (Soluble Glycoprotein 130)  
SHBG (Sex Hormone-Binding Globulin)  
sPLA2 Activity (Secretory Phospholipase Type A-II)\*  
sPLA2 Mass (Secretory Phospholipase Type A-II)\*  
Sucrose, Serum\*, Urine

Surfactant Protein A  
Surfactant Protein D

## T

T3 (Triiodothyronine)<sup>††</sup>  
T4 (Thyroxine)\*  
TARC (Thymus and Activation Regulated Chemokine)  
TAT (Thrombin-antithrombin Complex)\*  
Tenascin C  
Testosterone, Total  
TGF  $\beta$ -1 (Transforming Growth Factor Beta-1), Plasma\*, Serum, Urine  
Thioredoxin  
TIMP-1 (Tissue Inhibitor of Metalloproteinase-1)  
TNF $\alpha$  (Tissue Necrosis Factor alpha)  
Total Protein, Serum, Urine  
TRAcP-5b (Tartrate-resistant Acid Phosphatase-5b)  
Triglycerides, Net (Glycerol-blanked)<sup>†</sup>  
Triglycerides, Total<sup>†</sup>  
Troponin I\*  
Troponin T  
TSH (Thyroid Stimulating Hormone)\*  
Type IV Collagen (CT4)

## V

VCAM-1 (Vascular Adhesion Molecule-1)  
VEGF-A (Vascular Endothelial Growth Factor-A)  
VEGF-C (Vascular Endothelial Growth Factor-C)  
VEGF-D (Vascular Endothelial Growth Factor-D)  
VEGF-R1 (Vascular Endothelial Growth Factor-R1)  
VEGF-R2 (Vascular Endothelial Growth Factor-R2)  
VEGF-R3 (Vascular Endothelial Growth Factor-R3)  
Vitamin D 1,25 (Dihydroxyvitamin D)  
Vitamin D 25 (Hydroxyvitamin D2 + D3)  
VLDL – Apolipoprotein B  
VLDL – Apolipoprotein C-II  
VLDL – Apolipoprotein C-III  
VLDL – Apolipoprotein E  
VLDL – Triglycerides  
VLDL-C (Cholesterol)  
VLDL-C (Cholesterol) by Friedewald Equation  
VLDL-C (Cholesterol) by Ultracentrifugation

## W

WPTH – Whole PTH (3rd Generation Whole Parathyroid Hormone)

## Y

YKL-40\*

## AUSHON 2-PLEX PANELS

ICAM-1/VCAM-1 (Intracellular Adhesion Molecule-1/Vascular Adhesion Molecule-1)  
PI GF/VEGF-R2 (Placental Growth Factor/Vascular Endothelial Growth Factor-R2)

## AUSHON MULTIPLEX 9 CYTOKINE PANEL

IFN $\gamma$  (Interferon Gamma)  
IL-1 $\alpha$  (Interleukin-1 alpha)  
IL-1 $\beta$  (Interleukin-1 beta)  
IL-4 (Interleukin-4)  
IL-6 (Interleukin-6)  
IL-8 (Interleukin-8)  
IL-10 (Interleukin-10)  
IL-12p70 (Interleukin-12p70)  
TNF $\alpha$  (Tissue Necrosis Factor alpha)

## AUSHON CHEMOKINE 2 ARRAY (4-PLEX)

IP-10 (IFN- $\gamma$  Induced Protein 10) (CXCL 10)  
ITAC (Interferon-induced T-cell alpha Chemoattractant) (CXCL 11)  
MCP-1 (Monocyte Chemotactic Protein-1) (CCL 2)  
MIP-3 $\beta$  (Macrophage Inflammatory Protein-3 beta) (CCL 19)

## MSD MULTIPLEX 10 CHEMOKINE PANEL

Eotaxin (Eosinophil Chemotaxis Protein) (CCL 11)  
Eotaxin-3 (Eosinophil Chemotaxis Protein-3) (CCL 26)  
IL-8 HA (Interleukin 8, High Abundance) (CXCL 8)  
IP-10 (IFN $\gamma$  Induced Protein 10) (CXCL 10)  
MCP-1 (Monocyte Chemoattractant Protein 1) (CCL 2)  
MCP-4 (Monocyte Chemoattractant Protein 4) (CCL 13)  
MDC (Monocyte Derived Chemokine) (CCL 22)  
MIP-1 $\alpha$  (Macrophage Inflammatory Protein 1 alpha) (CCL 3)  
MIP-1 $\beta$  (Macrophage Inflammatory Protein 1 beta) (CCL 4)  
TARC (Thymus and Activation Regulated Chemokine) (CCL 17)

## MSD 2-PLEX PANEL

IL-10/IL-17

\*Inquire <sup>1</sup>CDC-Certified Assays <sup>2</sup>Partner Lab