

Nephrology Clinical Laboratory Research Compendium



The Nephrology Clinical Laboratory is a not-for-profit CAP and CLIA accredited facility that utilizes Good Clinical Laboratory Practice guidelines. We perform diagnostic laboratory services ranging from routine FDA approved assays to high-complexity lab developed tests. Our longstanding complement testing program includes quantitative and functional assays, activation markers, antibody titers, and complement drug levels. Our highly skilled team leverages the first-class infrastructure of Cincinnati Children's Research Foundation to support national and international investigators in all stages of biomarker research, from pre-clinical discovery and assay development to clinical test validation and multi-site clinical trials.

CONTACT US

For more information on research or clinical testing, please contact us at:

Phone: **513-636-4530**
nephclinicallab@cchmc.org

www.cincinnatichildrens.org

TECHNOLOGY/EQUIPMENT

- Siemens BNII Nephelometer
- Roche Cobas c 311 Integrated Chemistry System
- Dynex DS2 and DSX ELISA Systems
- Beckman IMMAGE 800
- MESO Quickplex SQ 120
- BioTek Synergy H1 Hybrid Multi-Mode Monochromator Fluorescence Microplate Reader
- Euroimmun Sprinter XL
- Euroimmun EUROPattern Microscope

SPECIALTIES

- Complement System Testing
- New Test Development
- Clinical Test Validation
- Biomarker Research Support
- Clinical Trials
- Pharmaceutical Trials

COMPLEMENT

Autoantibody Testing

- Factor H Autoantibody
- C3 Nephritic Factor
- Factor B Autoantibody

Functional Testing

- CH50
- Alternative Pathway Functional Assay
- MBL Pathway Functional Assay
- C1 inhibitor Functional Assay
- C5 Functional

Complement Activation Fragments

- Complement Bb
- Complement Ba
- C3a
- C3c
- C3d
- C4a
- C4d
- iC3b
- SC5b-9

Complement Components (Quantitative)

- C1 inhibitor (quantitative)
- C1q
- C2
- C3
- C4
- C5
- C6
- C7
- C8
- C9
- Factor B
- Factor D (coming soon)
- Factor H
- Factor I
- Properdin
- C4 Binding Protein
- MBL

SERUM PROTEINS (NEPHELOMETRY)

- | | | | |
|---|--|---------------------------------------|-------------------------------------|
| • ADNase B | • CDT (Carbohydrate Deficient Transferrin) | • Plasminogen | • α1-Microglobulin urine |
| • Albumin | • Ceruloplasmin | • Prealbumin | • α2-Macroglobulin |
| • Albumin Urine | • Ferritin | • RBP (Retinol Binding Protein) | • β2-Microglobulin |
| • ASO | • Fibrinogen | • sTfR (Soluble Transferrin Receptor) | • β2-Microglobulin urine |
| • Cystatin C | • Fibronectin | • Transferrin (for %CDT calculation) | • β trace protein |
| • Haptoglobin | • Hemopexin | • Transferrin | • Ig/light chain, type kappa |
| • High Sensitivity CRP (CardioPhase® hsCRP) | • Homocysteine | • Transferrin urine | • Ig/light chain, type lambda |
| • α1-Antitrypsin | • Lipoprotein(a) | • α1-Acid glycoprotein | • Ig/light chain, type kappa urine |
| • AT-III | • Myoglobin | | • Ig/light chain, type lambda urine |

TTP

- ADAMTS13 Activity
- ADAMTS13 Antibody
- ADAMTS13 Inhibitor

TDM

- Eculizumab Level
- Cyclosporine Level (CsA C0)
- Cyclosporine Level (CsA C2)
- Sirolimus Level
- Tacrolimus Level
- Mycophenolic Acid (MPAT)

IMMUNOLOGY

- PLA2R Autoantibody
- IgG
- IgG CSF
- IgG urine
- IgG subclasses 1–4
- IgM
- IgM CSF
- IgA
- IgE
- Rheumatoid factor
- COVID19 IgG
- COVID19 IgA

BIOMARKERS

- | | | |
|---|---|---|
| • Endothelin-1 | • Adiponectin | • Angiotensin 1–7 |
| • Neutrophil Gelatinase-Associated Lipocalin (NGAL) | • Glucose | • Angiotensin 1–9 |
| • Kidney Injury Molecule-1 (KIM-1) | • Microalbumin | • Angiotensin I |
| • Creatinine | • Vascular Endothelial Growth Factor (VEGF) | • Angiotensin II |
| • Macrophage Chemoattractant Protein-1 (MCP-1) | • Intracellular Adhesion Molecule 1 (CD54) | • Angiopietin I |
| • Liver Fatty Acid Binding Protein (LFABP) | • Vascular Cell Adhesion Molecule 1 (CD106) | • Angiopietin II |
| • Transforming Growth Factor-beta 1 (TGFβ-1) | • Fibroblast Growth Factor 23 (FGF23) | • Angiotensin converting enzyme-1 (ACE 1) |
| • Uromodulin (Tamm-Horsfall protein) | • Matrix Metalloproteinase 9 (MMP9) | • Angiotensin converting enzyme-2 (ACE 2) |
| • Alpha-1 antitrypsin | • N-acetyl Glucosaminidase (NAG) | • ACE activity |
| • Alpha-1 acid glycoprotein (orosomuroid) | • Renin | • Von Willebrand Factor protein (VWF) |
| • Hepcidin-25 | • Aldosterone | • Plasminogen activator inhibitor-1 (PAI-1) |
| • Troponin T | • Adiponectin | • Tissue plasminogen activator (T-PA) |
| • Vitamin D binding protein | • Interleukin 6 (IL-6) | • Cytokeratin 18 (M65) (M30) |
| | • Interleukin 18 (IL-18) | • Human CD163 |
| | • Matrix Metalloproteinase-7 (MMP-7) | • Human anti-endothelial cell antibody (AECA) |

The above list is not a comprehensive list of biomarkers.
Please contact us for special projects and specific testing needs.

For sample processing and shipping instructions, call 513-636-4530.