

### Client Information *(required)*

Client Name		
Client Account No.		
Client Phone	Client Order No.	
Street Address		
City	State	ZIP Code

### Submitting Provider Information *(required)*

Submitting/Referring Provider Name <i>(Last, First)</i>	
Phone (with area code)	Fax* (with area code)
National Provider Identification (NPI)	

\*Fax number given must be from a fax machine that complies with applicable HIPAA regulation.

### Genetic Counselor Information *(required)*

Genetic Counselor Name <i>(Last, First)</i>	
Phone (with area code)	Fax* (with area code)

\*Fax number given must be from a fax machine that complies with applicable HIPAA regulation.

**Note:** It is the client's responsibility to maintain documentation of the order.  
**New York State Patients: Informed Consent for Genetic Testing**

"I hereby confirm that informed consent has been signed by an individual legally authorized to do so and is on file with this office or the individual's provider's office."

Signature
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**Note:** Test requests without a signature will not be performed.

#### Ship specimens to:

Mayo Clinic Laboratories  
3050 Superior Drive NW  
Rochester, MN 55901

**Customer Service: 800-533-1710**

Visit [www.MayoClinicLabs.com](http://www.MayoClinicLabs.com) for the most up-to-date test and shipping information.

### Patient Information *(required)*

Patient ID (Medical Record No.)	
Patient Name <i>(Last, First, Middle)</i>	
Sex <input type="checkbox"/> Male <input type="checkbox"/> Female	Birth Date <i>(mm-dd-yyyy)</i>
Collection Date <i>(mm-dd-yyyy)</i>	Time <input type="checkbox"/> am <input type="checkbox"/> pm

### Reason for Testing *(required)*

<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
<p>Has molecular/DNA testing already been performed? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, results:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
<p>For molecular testing options, see <a href="http://www.MayoClinicLabs.com">www.MayoClinicLabs.com</a></p>

<p><b>MCL Internal Use Only</b></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
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#### Billing Information

- An itemized invoice will be sent each month.
- Payment terms are net 30 days.

Call the Business Office with billing-related questions:  
800-447-6424 (US and Canada)  
507-266-5490 (outside the US)

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### AMINO ACID METABOLISM

- AAQP Amino Acids, Quantitative, Plasma
- AAPD Amino Acids, Quantitative, Random, Urine
- AACSF Amino Acids, Quantitative, Spinal Fluid
- TRYPP Tryptophan, Plasma
- TRYPU Tryptophan, Random, Urine

#### Cystinuria

- CYSQN Cystinuria Profile, Quantitative, 24 Hour, Urine
- CYSR Cystinuria Profile, Quantitative, Random, Urine

#### Maple Syrup Urine Disease

- ALLOI Allo-isoleucine, Blood Spot
- AAMSD Amino Acids, Maple Syrup Urine Disease Panel, Plasma
- MSUSC Branched-Chain Amino Acids, Self-Collect, Blood Spot

#### Homocystinuria

- CMMPP Cobalamin, Methionine, and Methylmalonic Acid Pathways, Plasma
- CMMPS Cobalamin, Methionine, and Methylmalonic Acid Pathways, Serum
- HCYSY Homocysteine, Total, Plasma
- HCYSY Homocysteine, Total, Serum

#### Phenylketonuria

- PKU Phenylalanine and Tyrosine, Plasma
- PKUBS Phenylalanine and Tyrosine, Blood Spot
- PKUSC Phenylalanine and Tyrosine, Self-Collect, Blood Spot

#### Tyrosinemia

- TYRBS Tyrosinemia Follow up Panel, Blood Spot
- TYRSC Tyrosinemia Follow up panel, Self-Collect, Blood Spot
- SUAC Succinylacetone, Blood Spot

### CARBOHYDRATE METABOLISM

#### Congenital Disorders of Glycosylation

- CDG Carbohydrate Deficient Transferrin for Congenital Disorders of Glycosylation, Serum
- CDGN Congenital Disorders of N-Glycosylation, Serum
- OLIGU Oligosaccharide Screen, Random, Urine
- PMMIL Phosphomannomutase and Phosphomannose Isomerase, Leukocytes
- SORBU Sorbitol and Mannitol, Quantitative, Random, Urine

### Galactosemia

- GATOL Galactitol, Quantitative, Urine
- GALK Galactokinase, Blood
- GAL1P Galactose-1-Phosphate, Erythrocytes
- GALT Galactose-1-Phosphate Uridyltransferase, Blood
- GALTP Galactose-1-Phosphate Uridyltransferase Biochemical Phenotyping, Erythrocytes
- GALP Galactose, Quantitative, Plasma
- GCT Galactosemia Reflex, Blood
- GALE UDP-Galactose 4' Epimerase, Blood

#### Transaldolase and Ribose-5-phosphate (RPI) Deficiencies

- TALDO Polyols, Quantitative, Urine

### CHOLESTEROL BIOSYNTHESIS AND TRANSPORT

- CTXWB Cerebrotendinous Xanthomatosis, Blood
- CTXBS Cerebrotendinous Xanthomatosis, Blood Spot
- CTXP Cerebrotendinous Xanthomatosis, Plasma
- HSMBS Hepatosplenomegaly Panel, Blood Spot
- HSMWB Hepatosplenomegaly Panel, Blood
- HSMP Hepatosplenomegaly Panel, Plasma
- NIEM Niemann-Pick Type C Detection, Fibroblasts
- OXYWB Oxysterols, Blood
- OXYBS Oxysterols, Blood Spots
- OXNP Oxysterols, Plasma
- SLO Smith-Lemli-Opitz Screen, Plasma
- STER Sterols, Plasma

### CONGENITAL ADRENAL HYPERPLASIA

- CAH2T Congenital Adrenal Hyperplasia Newborn Screening, Blood Spot
- CAH2I Congenital Adrenal Hyperplasia Profile for 21-Hydroxylase Deficiency, Serum

### CREATINE DISORDERS

- CRDPP Creatine Disorders Panel, Plasma
- CRDPU Creatine Disorders Panel, Random, Urine

### DEOXYSPHINGOLIPIDS

- HSN1 Hereditary Sensory and Autonomic Neuropathy, Type I, Serum

### FAMILIAL AMYLOIDOSIS

- TTRX Amyloidosis, Transthyretin-Associated Familial, Reflex, Blood

### FATTY ACID METABOLISM (BETA-OXIDATION)

- ACRN Acylcarnitines, Quantitative, Plasma
- ACRNS Acylcarnitines, Quantitative, Serum
- AGU20 Acylglycines, Quantitative, Random, Urine
- C4U C4 Acylcarnitine, Quantitative, Random, Urine
- CARN Carnitine, Plasma
- CARNS Carnitine, Serum
- CARNU Carnitine, Random, Urine
- FAO Fatty Acid Oxidation Probe Assay, Fibroblast Culture
- FAPCP Fatty Acid Profile, Comprehensive (C8-C26), Serum
- FAPM Fatty Acid Profile, Mitochondrial (C8-C18), Serum
- OAU Organic Acids Screen, Random, Urine

### ORGANIC ACID METABOLISM

- C5OHU C5-OH Acylcarnitine, Quantitative, Random, Urine in this first group of tests with OAU and O AUS
- OAU Organic Acids Screen, Random, Urine
- O AUS Organic Acid Screen, Urine Spot

#### 2-Hydroxyglutaric Aciduria

- 2HGA 2-Hydroxyglutaric Acid Chiral Analysis, Quantitative, Random, Urine

#### Biotinidase Deficiency

- BIOTS Biotinidase, Serum

#### Glutaric Acidemia

- C5DCU C5-DC Acylcarnitine, Quantitative, Random, Urine
- HGEM Hydroxyglutaric Acids, Glutaric Acid, Ethylmalonic Acid, and Methylsuccinic Acid, Blood Spot
- HGEMP Hydroxyglutaric Acids, Glutaric Acid, Ethylmalonic Acid, and Methylsuccinic Acid, Plasma
- HGEMS Hydroxyglutaric Acids, Glutaric Acid, Ethylmalonic Acid, and Methylsuccinic Acid, Serum
- TRYPP Tryptophan, Plasma
- TRYPU Tryptophan, Random, Urine

#### Methylmalonic Acidemia/Cobalamin/Propionic Acidemia

- CMMPP Cobalamin, Methionine, and Methylmalonic Acid Pathways, Plasma
- CMMPS Cobalamin, Methionine, and Methylmalonic Acid Pathways, Serum
- MMAP Methylmalonic Acid, Quantitative, Plasma
- MMAS Methylmalonic Acid, Quantitative, Serum
- MMAU Methylmalonic Acid, Quantitative, Urine

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<b>FREDREICH ATAXIA</b>
<input type="checkbox"/> FFRBS Friedrich Ataxia, Frataxin, Quantitative, Blood Spot <input type="checkbox"/> FFRWB Friedrich Ataxia, Frataxin, Quantitative, Blood

<b>HYPEROXALURIA</b>
<input type="checkbox"/> HYOX Hyperoxaluria Panel, Random, Urine

<b>LYSOSOMAL METABOLISM AND STORAGE DISORDERS</b>
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<b>Multi-Disorder Panels</b>
<input type="checkbox"/> CTSU Ceramide Trihexosides and Sulfatides, Random, Urine <input type="checkbox"/> HSMWB Hepatosplenomegaly Panel, Blood <input type="checkbox"/> HSMP Hepatosplenomegaly Panel, Plasma <input type="checkbox"/> PLSD Lysosomal and Peroxisomal Storage Disorders Screen, Blood Spot <input type="checkbox"/> LSDS Lysosomal Storage Disorders Screen, Random, Urine <input type="checkbox"/> LSD6W Lysosomal Storage Disorders, Six-Enzyme Panel, Leukocytes <input type="checkbox"/> MPSBS Mucopolysaccharidosis, Blood Spot <input type="checkbox"/> MPSQU Mucopolysaccharides Quantitative, Random, Urine <input type="checkbox"/> OLIGU Oligosaccharide Screen, Random, Urine <input type="checkbox"/> OXNP Oxysterols, Plasma

<b>Fabry Disease</b>
<input type="checkbox"/> AGABS Alpha-Galactosidase, Blood Spot <input type="checkbox"/> AGAW Alpha-Galactosidase, Leukocytes <input type="checkbox"/> AGAS Alpha-Galactosidase, Serum <input type="checkbox"/> CTSU Ceramide Trihexosides and Sulfatides, Random, Urine <input type="checkbox"/> LGB3S Globotriaosylsphingosine, Serum

<b>Fucosidosis</b>
<input type="checkbox"/> FUCW Alpha-Fucosidase, Leukocytes

<b>Gaucher Disease</b>
<input type="checkbox"/> GBAW Beta-Glucosidase, Leukocytes <input type="checkbox"/> GPSYW Glucopsychosine, Blood <input type="checkbox"/> GPSY Glucopsychosine, Blood Spot <input type="checkbox"/> GPSYP Glucopsychosine, Plasma

<b>GM1 Gangliosidosis</b>
<input type="checkbox"/> GBAW Beta-Galactosidase, Blood <input type="checkbox"/> BGABS Beta-Galactosidase, Blood Spot <input type="checkbox"/> BGA Beta-Galactosidase, Leukocytes

<b>Krabbe Disease</b>
<input type="checkbox"/> GALCW Galactocerebrosidase, Leukocytes <input type="checkbox"/> PSY Psychosine, Blood Spot <input type="checkbox"/> PSYCF Psychosine, Spinal Fluid <input type="checkbox"/> PSYR Psychosine, Whole Blood

<b>Lysosomal Acid Lipase Deficiency</b>
<input type="checkbox"/> LALB Lysosomal Acid Lipase, Blood <input type="checkbox"/> LALBS Lysosomal Acid Lipase, Blood Spot

<b>Mannosidosis</b>
<input type="checkbox"/> MANN Alpha-Mannosidase, Leukocytes

<b>Metachromatic Leukodystrophy</b>
<input type="checkbox"/> ARSU Arylsulfatase A, 24 Hour, Urine <input type="checkbox"/> ARSAW Arylsulfatase A, Leukocytes <input type="checkbox"/> CTSU Ceramide Trihexosides and Sulfatides, Random, Urine

<b>Mucopolysaccharidoses</b>
<input type="checkbox"/> MPSQU Mucopolysaccharides Quantitative, Random, Urine <input type="checkbox"/> MPSEB Mucopolysaccharides Quantitative, Serum <input type="checkbox"/> MPSWB Mucopolysaccharidosis, Blood <input type="checkbox"/> MPSBS Mucopolysaccharidosis, Blood Spot

<b>MPS Type I (Hurler/Scheie)</b>
<input type="checkbox"/> IDUAW Alpha-L-Iduronidase, Leukocytes <input type="checkbox"/> MPSEB Mucopolysaccharides Quantitative, Serum

<b>MPS Type II (Hunter)</b>
<input type="checkbox"/> I2SBS Iduronate-2-Sulfatase, Blood Spot <input type="checkbox"/> I2SW Iduronate-2-Sulfatase, Blood

<b>MPS Type IIIB (Sanfilippo Type B)</b>
<input type="checkbox"/> ANAS Alpha-N-Acetylglucosaminidase, Serum

<b>MPS Type IVA (Morquio A)</b>
<input type="checkbox"/> G6SW N-Acetylgalactosamine-6-Sulfatase, Leukocytes

<b>MPS Type IVB (Morquio B)</b>
<input type="checkbox"/> BGAW Beta-Galactosidase, Blood <input type="checkbox"/> BGABS Beta-Galactosidase, Blood Spot <input type="checkbox"/> BGA Beta-Galactosidase, Leukocytes

<b>Niemann-Pick Types A and B</b>
<input type="checkbox"/> ASMW Acid Sphingomyelinase, Leukocytes <input type="checkbox"/> OXNP Oxysterols, Plasma

<b>Niemann-Pick Type C</b>
<input type="checkbox"/> NIEM Niemann-Pick Type C Detection, Fibroblasts <input type="checkbox"/> OXNP Oxysterols, Plasma

<b>Neuronal Ceroid Lipofuscinoses</b>
<input type="checkbox"/> TPPTL Tripeptidyl Peptidase 1 and Palmitoyl-Protein Thioesterase 1, Leukocytes

<b>Pompe Disease</b>
<input type="checkbox"/> GAAW Acid Alpha-Glucosidase, Leukocytes <input type="checkbox"/> HEX4 Glucotetrasaccharides, Random, Urine <input type="checkbox"/> PDBS Pompe Disease, Blood Spot <input type="checkbox"/> PDCRF Pompe Disease Cross-Reactive Immunological Material Status, Fibroblasts <input type="checkbox"/> PDCRW Pompe Disease Cross-Reactive Immunological Material Status, Leukocytes

<b>Tay-Sachs and Sandhoff Diseases</b>
<input type="checkbox"/> NAGW Hexosaminidase A and Total Hexosaminidase, Leukocytes <input type="checkbox"/> NAGS Hexosaminidase A and Total Hexosaminidase, Serum <input type="checkbox"/> NAGR Hexosaminidase A and Total, Leukocytes/Molecular Reflex, Whole Blood <input type="checkbox"/> MUGS Hexosaminidase A, Serum

<b>MITOCHONDRIAL ENERGY METABOLISM</b>
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<input type="checkbox"/> Q10 Coenzyme Q10, Reduced and Total, Plasma <input type="checkbox"/> TQ10 Coenzyme Q10, Total, Plasma <input type="checkbox"/> FAPM Fatty Acid Profile, Mitochondrial (C8-C18), Serum <input type="checkbox"/> GDF15 Growth Differentiation Factor 15, Plasma <input type="checkbox"/> LAPYP Lactate Pyruvate Panel, Plasma <input type="checkbox"/> MMPP Mitochondrial Metabolites, Plasma <input type="checkbox"/> OAU Organic Acids Screen, Random, Urine <input type="checkbox"/> PDHC Pyruvate Dehydrogenase Complex, Fibroblasts <input type="checkbox"/> PYRC Pyruvate, Spinal Fluid <input type="checkbox"/> PYR Pyruvic Acid, Blood
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<b>NEWBORN SCREENING</b>
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<b>Screening Panels</b>
<input type="checkbox"/> LDALD Lysosomal and Peroxisomal Disorders Newborn Screen, Blood Spot <input type="checkbox"/> SNS Supplemental Newborn Screen, Blood Spot

<b>Second Tier Tests</b>
<input type="checkbox"/> ALLOI Allo-isoleucine, Blood Spot <input type="checkbox"/> CAH2T Congenital Adrenal Hyperplasia Newborn Screen, Blood Spot <input type="checkbox"/> GPSY Glucopsychosine, Blood Spot <input type="checkbox"/> HCMM Homocysteine (Total), Methylmalonic Acid, and Methylcitric Acid, Blood Spot <input type="checkbox"/> HGEM Hydroxyglutaric Acids, Glutaric Acid, Ethylmalonic Acid, and Methylsuccinic Acid, Blood Spot <input type="checkbox"/> KD2T Krabbe Disease Second-Tier Newborn Screen, Blood Spot <input type="checkbox"/> LPCBS Lysophosphatidylcholines, LC MS/MS, Blood Spot <input type="checkbox"/> MPSBS Mucopolysaccharidosis, Blood Spot <input type="checkbox"/> OXYBS Oxysterols, Blood Spot <input type="checkbox"/> PD2T Pompe Disease Second-Tier Newborn Screening, Blood Spot <input type="checkbox"/> PSY Psychosine, Blood Spot <input type="checkbox"/> SUAC Succinylacetone, Blood Spot

