Complete, print and submit

Reset Form

MAYO CLINIC
Mayo Medical Laboratories

Inborn Errors of Metabolism Test Request Form

Client Information (required)

Client Name		
Client Account No.		
Client Phone	Client Order No.	
Address		
City	State	Zip Code

Patient Information (required)

Patient ID *(Medical Record No.)*		
Patient Name *(Last, First, Middle)*		
Gender ☐ Male ☐ Female	Birth Date *(Month DD, YYYY)*	
Collection Date *(Month DD, YYYY)*	Time ☐ a.m. ☐ p.m.	
Patient's Street Address		
Phone		
City	State	Zip Code

Submitting Provider/Provider Name Information (required)

Submitting/Referring Provider *(Last, First)*
Fill in only if Call Back is required. Phone ( ) _____ – _____ Fax * ( ) _____ – _____
Provider's National I.D. (NPI)

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

MML Internal Use Only

Reason for Referral (required)

ICD-10 Diagnosis Code

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 _____

Note: It is the client's responsibility to maintain documentation of the order.

Ship specimens to:

Mayo Medical Laboratories
3050 Superior Drive NW
Rochester, MN 55901

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)

Customer Service: 855-516-8404

Visit www.MayoMedicalLaboratories.com for the most up-to-date test and shipping information.

Next Page

T798
MC0767-16A

Provider Name

Provider Name

Patient Information (required)

Patient Name *(Last, First, Middle)*

Birth Date *(Month DD, YYYY)*

ICD-10 Diagnosis Code

GENERAL BIOCHEMICAL TESTS

- ☐ ACRN Acylcarnitines, Quantitative, Plasma
- ☐ ACRNS Acylcarnitines, Quantitative, Serum
- ☐ ACYLG Acylglycines, Quantitative, Urine
- ☐ AAQP Amino Acids, Quantitative, Plasma
- ☐ AAPD Amino Acids, Quantitative, Random, Urine
- ☐ AACSF Amino Acids, Quantitative, Spinal Fluid
- ☐ CRDPU Creatine Disorders Panel, Urine
- ☐ FAPCP Fatty Acid Profile, Comprehensive (C8-C26), Serum
- ☐ LYSDU Lysosomal Storage Disorders Screen, Urine
- ☐ OLIGU Oligosaccharide Screen, Urine
- ☐ OAU Organic Acids Screen, Urine
- ☐ PUPYU Purine and Pyrimidine Panel, Urine

AMINO ACID METABOLISM

- ☐ AAMSD Amino Acids, Maple Syrup Urine Disease Panel, Plasma
- ☐ AAQP Amino Acids, Quantitative, Plasma
- ☐ AAPD Amino Acids, Quantitative, Random, Urine
- ☐ AACSF Amino Acids, Quantitative, Spinal Fluid
- ☐ HCMM Homocysteine (Total), Methylmalonic Acid, and Methylcitric Acid, Blood Spots
- ☐ HCYSS Homocysteine, Total, Serum
- ☐ HCYSU Homocysteine, Total, 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
- ☐ OAU Organic Acids Screen, Urine
- ☐ SUAC Succinylacetone, Blood Spot
- ☐ TRYPP Tryptophan, Plasma
- ☐ TRYPU Tryptophan, Urine

Cystinuria

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

Glutamate Formiminotransferase Deficiency

- ☐ GFDZ FTCD Gene, Full Gene Analysis

Maple Syrup Urine Disease

- ☐ ALLOI Allo-isoleucine, Blood Spot

Methylmalonic Acidemia & Homocystinuria

- ☐ MMAP Methylmalonic Acid (MMA), Quantitative, Plasma
- ☐ MMAS Methylmalonic Acid (MMA), Quantitative, Serum
- ☐ MMAU Methylmalonic Acid (MMA), Quantitative, Urine
- ☐ MHCZ Methylmalonic Aciduria and Homocystinuria, cblC Type, Full Gene Analysis
- ☐ MHDZ Methylmalonic Aciduria and Homocystinuria, cblD Type, Full Gene Analysis

Phenylketonuria

- ☐ PKU Phenylalanine and Tyrosine, Plasma
- ☐ PKUBS Phenylalanine and Tyrosine, Blood Spot

CARBOHYDRATE METABOLISM

- ☐ CHOU Carbohydrate, Urine
- ☐ GALP Galactose, Quantitative, Plasma
- ☐ GALU Galactose, Quantitative, Urine

Congenital Disorders of Glycosylation

- ☐ CDG Carbohydrate Deficient Transferrin for Congenital Disorders of Glycosylation, Serum
- ☐ PMMIL Phosphomannomutase (PMM) and Phosphomannose Isomerase (PMI), Leukocytes

Galactosemia

- ☐ GATOL Galactitol, Quantitative, Urine
- ☐ GALK Galactokinase, Blood
- ☐ GAL1P Galactose-1-Phosphate (Gal-1-P), Erythrocytes
- ☐ GALT Galactose-1-Phosphate Uridyltransferase (GALT), Blood
- ☐ GALTP Galactose-1-Phosphate Uridyltransferase Biochemical Phenotyping, Erythrocytes
- ☐ GAL14 Galactosemia Gene Analysis (14-Mutation Panel)
- ☐ GCT Galactosemia Reflex, Blood
- ☐ GALTZ GALT Gene, Full Gene Analysis
- ☐ GALE UDP-Galactose 4' Epimerase (GALE), Blood

Transaldolase and Ribose-5-phosphate (RPI) Deficiencies

- ☐ TALDO Polyols, Quantitative, Urine

CHOLESTEROL BIOSYNTHESIS & TRANSPORT

- ☐ NIEM Niemann-Pick Type C Detection, Fibroblasts
- ☐ NPCZ Niemann-Pick Type C Disease, Full Gene Analysis
- ☐ OXYBS Oxysterols, Blood Spots
- ☐ OXNP Oxysterols, Plasma
- ☐ SLO Smith-Lemli-Opitz Screen, Plasma
- ☐ STER Sterols, Plasma

CONGENITAL ADRENAL HYPERPLASIA

- ☐ CYPZ 21-Hydroxylase Gene (CYP21A2), Full Gene Analysis
- ☐ CAH21 Congenital Adrenal Hyperplasia Profile for 21-Hydroxylase Deficiency

CREATINE DISORDERS

- ☐ CRDPU Creatine Disorders Panel, Urine

FATTY ACID METABOLISM (BETA-OXIDATION) & ORGANIC ACID DISORDERS

- ☐ ACRN Acylcarnitines, Quantitative, Plasma
- ☐ ACRNS Acylcarnitines, Quantitative, Serum
- ☐ ACYLG Acylglycines, Quantitative, Urine
- ☐ AAQP Amino Acids, Quantitative, Plasma
- ☐ AAPD Amino Acids, Quantitative, Random, Urine
- ☐ AACSF Amino Acids, Quantitative, Spinal Fluid
- ☐ C4U C4 Acylcarnitine, Quantitative, Urine
- ☐ C5DCU C5-DC Acylcarnitine, Quantitative, Urine
- ☐ C5OHU C5-OH Acylcarnitine, Quantitative, Urine
- ☐ CARN Carnitine, Plasma
- ☐ CARNS Carnitine, Serum
- ☐ CARNU Carnitine, Urine
- ☐ FAO Fatty Acid Oxidation Probe Assay, Fibroblast Culture
- ☐ FAPCP Fatty Acid Profile, Comprehensive (C8-C26), Serum
- ☐ FAPEP Fatty Acid Profile, Essential, Serum
- ☐ FAPM Fatty Acid Profile, Mitochondrial (C8-C18), Serum
- ☐ HCYSU Homocysteine, Total, Urine
- ☐ OAU Organic Acids Screen, Urine
- ☐ PMSBB Postmortem Screening, Bile and Blood Spots

Biotinidase Deficiency

- ☐ BTDZ Biotinidase Deficiency, BTD Full Gene Analysis
- ☐ BIOTS Biotinidase, Serum

Carnitine-Acylcarnitine Translocase Deficiency

- ☐ CACTZ Carnitine-Acylcarnitine Translocase Deficiency, Full Gene Analysis

Carnitine Palmitoyltransferase II Deficiency

- ☐ CPT2Z Carnitine Palmitoyltransferase II Deficiency, Full Gene Analysis

Isovaleric Acidemia

- ☐ IVDA Isovaleryl-CoA Dehydrogenase (IVD) Gene Mutation Analysis (A282V)

Malonyl-Coenzyme A Decarboxylase Deficiency

- ☐ MLYCZ MLYCD Gene, Full Gene Analysis

Next Page

Provider Name

Provider Name

Patient Information (required)

Patient Name *(Last, First, Middle)*

Birth Date *(Month DD, YYYY)*

ICD-10 Diagnosis Code

Medium-Chain Acyl-CoA Dehydrogenase Deficiency

- ☐ MCADZ — Medium-Chain Acyl-CoA Dehydrogenase (MCAD) Deficiency Full Gene Analysis

Short-Chain Acyl-CoA Dehydrogenase Deficiency

- ☐ SCADZ — Short-Chain Acyl-CoA Dehydrogenase (SCAD) Deficiency, Full Gene Analysis

Very Long Chain Acyl-CoA Dehydrogenase Deficiency

- ☐ VLCZ — Very Long Chain Acyl-CoA Dehydrogenase Deficiency, Full Gene Analysis

FREDREICH ATAXIA

- ☐ FFRBS — Friedreich Ataxia, Frataxin, Quantitative, Blood Spot
- ☐ FFRWB — Friedreich Ataxia, Frataxin, Quantitative, Whole Blood

HYPEROXALURIA

- ☐ AGXTG — Alanine:Glyoxylate Aminotransferase (AGXT) Mutation Analysis (G170R), Blood
- ☐ AGXTZ — AGXT Gene, Full Gene Analysis
- ☐ GRHPZ — GRHPR Gene, Full Gene Analysis
- ☐ HYOX — Hyperoxaluria Panel, Urine

LYSOSOMAL METABOLISM & STORAGE DISORDERS

Multi-Disorder Panels

- ☐ CTSA — Ceramide Trihexosides and Sulfatides, Urine
- ☐ GSDP — Glycogen Storage Disease Panel by Next-Generation Sequencing
- ☐ PLSD — Lysosomal and Peroxisomal Storage Disorders Screen, Blood Spot
- ☐ LSDP — Lysosomal Storage Disease Panel by Next-Generation Sequencing
- ☐ LYSDU — Lysosomal Storage Disorders Screen, Urine
- ☐ MPSSC — Mucopolysaccharides (MPS) Screen, Urine
- ☐ MPSQN — Mucopolysaccharides (MPS), Quantitative, Urine
- ☐ SFPAN — Mucopolysaccharidosis III, Multi-Gene Panel
- ☐ OLIGU — Oligosaccharide Screen, Urine

Fabry Disease

- ☐ AGABS — Alpha-Galactosidase, Blood Spot
- ☐ AGA — Alpha-Galactosidase, Leukocytes
- ☐ AGAS — Alpha-Galactosidase, Serum
- ☐ CTSA — Ceramide Trihexosides and Sulfatides, Urine
- ☐ FABRZ — Fabry Disease, Full Gene Analysis

Fucosidosis

- ☐ FUCW — Alpha-Fucosidase, Leukocytes

Gaucher Disease

- ☐ BGL — Beta-Glucosidase, Leukocytes
- ☐ GBAZ — Gaucher Disease, Full Gene Analysis
- ☐ GAUP — Gaucher Disease, Mutation Analysis, GBA
- ☐ GPSY — Glucopsychosine, Blood Spots

GM1 Gangliosidosis

- ☐ BGAW — Beta-Galactosidase, Blood
- ☐ BGABS — Beta-Galactosidase, Blood Spot
- ☐ BGA — Beta-Galactosidase, Leukocytes

Krabbe Disease

- ☐ CBGC — Galactocerebrosidase, Leukocytes
- ☐ KRABZ — Krabbe Disease, Full Gene Analysis and Large (30 kb) Deletion, PCR
- ☐ PSY — Psychosine, Blood Spots

Lysosomal Acid Lipase Deficiency

- ☐ LALB — Lysosomal Acid Lipase, Blood
- ☐ LALBS — Lysosomal Acid Lipase, Blood Spot

Mannosidosis

- ☐ MANN — Alpha-Mannosidase, Leukocytes

Metachromatic Leukodystrophy

- ☐ ARSAZ — ARSA Gene, Full Gene Analysis
- ☐ ARSU — Arylsulfatase A, 24 Hour, Urine
- ☐ ARSAW — Arylsulfatase A, Leukocytes
- ☐ CTSA — Ceramide Trihexosides and Sulfatides, Urine

MPS Type I (Hurler/Scheie)

- ☐ IDSWB — Alpha-L-Iduronidase, Blood
- ☐ IDSBS — Alpha-L-Iduronidase, Blood Spot
- ☐ MPS1Z — Hurler Syndrome, Full Gene Analysis
- ☐ MPSBS — Mucopolysaccharidosis, Blood Spot

MPS Type II (Hunter)

- ☐ MPS2Z — Hunter Syndrome, Full Gene Analysis
- ☐ I2SBS — Iduronate-2-Sulfatase, Blood Spot
- ☐ I2SW — Iduronate-2-sulfatase, Whole Blood
- ☐ MPSBS — Mucopolysaccharidosis, Blood Spot

MPS Type IIIA (Sanfilippo Type A)

- ☐ MP3AZ — Mucopolysaccharidosis IIIA, Full Gene Analysis

MPS Type IIIB (Sanfilippo Type B)

- ☐ ANAS — Alpha-N-Acetylglucosaminidase, Serum
- ☐ MP3BZ — Mucopolysaccharidosis IIIB, Full Gene Analysis

MPS Type IIIC (Sanfilippo Type C)

- ☐ MP3CZ — Mucopolysaccharidosis IIIC, Full Gene Analysis

MPS Type IIID (Sanfilippo Type D)

- ☐ MP3DZ — Mucopolysaccharidosis IIID, Full Gene Analysis

MPS Type IVA (Morquio A)

- ☐ KSQNU — Keratan Sulfate Quantitative, Urine
- ☐ G6SW — N-Acetylgalactosamine-6-Sulfatase, Leukocytes
- ☐ G6ST — N-Acetylgalactosamine-6-Sulfate Sulfatase, Fibroblasts

MPS Type IVB (Morquio B)

- ☐ KSQNU — Keratan Sulfate Quantitative, Urine
- ☐ BGAW — Beta-Galactosidase, Blood
- ☐ BGABS — Beta-Galactosidase, Blood Spot
- ☐ BGA — Beta-Galactosidase, Leukocytes

MPS Type VI (Maroteaux-Lamy)

- ☐ MPS6Z — Mucopolysaccharidosis VI, Full Gene Analysis
- ☐ ARSB — Arylsulfatase B, Fibroblasts

Mucolipidoses

- ☐ GNPTZ — GNPTAB Gene, Full Gene Analysis
- ☐ MCIVP — Mucolipidosis IV, Mutation Analysis, IVS3(-2) A->G and del6.4kb

Multiple Sulfatase Deficiency

- ☐ SUMFZ — Multiple Sulfatase Deficiency, Full Gene Analysis

Niemann-Pick Types A&B

- ☐ NPABZ — Niemann-Pick Disease, Types A and B, Full Gene Analysis
- ☐ NPABP — Niemann-Pick Disease, Types A and B, Mutation Analysis
- ☐ OXYBS — Oxysterols, Blood Spots
- ☐ OXNP — Oxysterols, Plasma

Neuronal Ceroid Lipofuscinoses

- ☐ NCLP — Neuronal Ceroid Lipofuscinosis (NCL, Batten Disease) Panel by Next-Generation Sequencing
- ☐ TPPTF — Tripeptidyl Peptidase 1 (TPP1) and Palmitoyl-Protein Thioesterase 1 (PPT1), Fibroblasts
- ☐ TPPTL — Tripeptidyl Peptidase 1 (TPP1) and Palmitoyl-Protein Thioesterase 1 (PPT1), Leukocytes

Pompe Disease

- ☐ GAABS — Acid Alpha-Glucosidase, Blood Spot
- ☐ GAAZ — Pompe Disease, Full Gene Analysis

Sialidosis

- ☐ NEURF — Neuraminidase, Fibroblasts

Tay-Sachs & Sandhoff Diseases

- ☐ MUGS — Hexosaminidase A (MUGS), Serum
- ☐ NAGW — Hexosaminidase A and Total Hexosaminidase, Leukocytes
- ☐ NAGS — Hexosaminidase A and Total Hexosaminidase, Serum
- ☐ NAGAJ — Hexosaminidase A and Total, Leukocytes/ Ashkenazi Jewish
- ☐ NAGR — Hexosaminidase A and Total, Leukocytes/ Molecular Reflex
- ☐ HEXAZ — Tay-Sachs Disease, HEXA Gene, Full Gene Analysis

Next Page

Provider Name

Provider Name

Patient Information (required)

Patient Name *(Last, First, Middle)*

Birth Date *(Month DD, YYYY)*

ICD-10 Diagnosis Code

MITOCHONDRIAL ENERGY METABOLISM

- ☐ Q10 — Coenzyme Q10, Reduced and Total, Plasma
- ☐ TQ10 — Coenzyme Q10, Total, Plasma
- ☐ GDF15 — Growth Differentiation Factor 15 (GDF15), Plasma
- ☐ LAA — Lactate, Plasma
- ☐ LABF — Lactate, Body Fluid
- ☐ MITON — Mitochondrial Nuclear Gene Panel by Next-Generation Sequencing (NGS)
- ☐ MITOT — Combined Mitochondrial Analysis, Mitochondrial Full Genome and Nuclear Gene Panel
- ☐ MITOP — Mitochondrial Full Genome Analysis by Next-Generation Sequencing (NGS)
- ☐ PDHC — Pyruvate Dehydrogenase Complex (PDHC), Fibroblasts
- ☐ PYRC — Pyruvate, Spinal Fluid
- ☐ PYR — Pyruvic Acid, Blood

NEWBORN SCREENING

Screening Panels

- ☐ LDALD — Lysosomal and Peroxisomal Disorders Newborn Screen, Blood Spot
- ☐ LSD6 — Lysosomal Storage Disorders Newborn Screen, Blood Spot
- ☐ NBSE — Newborn Screening Expanded Panel, Blood Spot
- ☐ NBSR — Newborn Screen Recommended Panel, Blood Spot
- ☐ SNS — Supplemental Newborn Screen, Blood Spot

Second Tier Tests

- ☐ ALLOI — Allo-isoleucine, Blood Spot
- ☐ CAH2T — Congenital Adrenal Hyperplasia (CAH) Newborn Screen, Blood Spot
- ☐ GPSY — Glucopsychosine, Blood Spot
- ☐ HCMM — Homocysteine (Total), Methylmalonic Acid, and Methylcitric Acid, Blood Spots
- ☐ HGEM — Hydroxyglutaric Acids, Glutaric Acid, Ethylmalonic Acid, and Methylsuccinic Acid, Blood Spot
- ☐ KD2T — Krabbe Disease Second-Tier Newborn Screen, Blood Spot
- ☐ LPCBS — Lysophosphatidylcholines by LC MS/MS, Blood Spot
- ☐ MPSBS — Mucopolysaccharidosis, Blood Spot
- ☐ OXYBS — Oxysterols, Blood Spots
- ☐ PD2T — Pompe Disease Second-Tier Newborn Screening, Blood Spot
- ☐ PSY — Psychosine, Blood Spot
- ☐ SUAC — Succinylacetone, Blood Spot

PEROXISOMAL BIOGENESIS & METABOLISM

- ☐ BAIPD — Bile Acids for Peroxisomal Disorders, Serum
- ☐ POX — Fatty Acid Profile, Peroxisomal (C22-C26), Serum
- ☐ PDP — Peroxisomal Disorder Panel by Next-Generation Sequencing
- ☐ PIPA — Pipecolic Acid, Serum
- ☐ PIPU — Pipecolic Acid, Urine
- ☐ XALDZ — X-Linked Adrenoleukodystrophy, Full Gene Analysis

PORPHYRIAS

- ☐ APPAN — Acute Porphyria, Multi-Gene Panel
- ☐ PBGU — Porphobilinogen, Quantitative, Random, Urine
- ☐ FQPPS — Porphyrins, Feces
- ☐ PQNU — Porphyrins, Quantitative, 24 Hour, Urine
- ☐ PQNRU — Porphyrins, Quantitative, Random, Urine
- ☐ PTP — Porphyrins, Total, Plasma

Aminolevulinic Acid Dehydratase Deficiency Porphyria

- ☐ ALAUR — Aminolevulinic Acid (ALA), Urine
- ☐ ALADW — Aminolevulinic Acid Dehydratase (ALA-D), Washed Erythrocytes
- ☐ ALAD — Aminolevulinic Acid Dehydratase (ALAD), Whole Blood

Acute Intermittent Porphyria

- ☐ HMBSZ — HMBS Gene, Full Gene Analysis
- ☐ PBGDW — Porphobilinogen Deaminase (PBGD), Washed Erythrocytes
- ☐ PBGD_ — Porphobilinogen Deaminase (PBGD), Whole Blood

Congenital Erythropoietic Porphyria

- ☐ UPGC — Uroporphyrinogen III Synthase (Co-Synthase) (UPG III S), Erythrocytes
- ☐ FECHZ — Ferrochelatase (FECH) Gene, Full Gene Analysis
- ☐ PEWE — Porphyrins Evaluation, Washed Erythrocytes
- ☐ PEE — Porphyrins Evaluation, Whole Blood
- ☐ PPFWE — Protoporphyrins, Fractionation, Washed Erythrocytes
- ☐ PPFE — Protoporphyrins, Fractionation, Whole Blood

Hereditary Coproporphyria

- ☐ CPOXZ — CPOX Gene, Full Gene Analysis

Porphyria Cutanea Tarda

- ☐ UPGDW — Uroporphyrinogen Decarboxylase (UPG D), Washed Erythrocytes
- ☐ UPGD — Uroporphyrinogen Decarboxylase (UPG D), Whole Blood

Variegate Porphyria

- ☐ PPOXZ — PPOX Gene, Full Gene Analysis

X-linked Dominant Protoporphyria

- ☐ PPFWE — Protoporphyrins, Fractionation, Washed Erythrocytes
- ☐ PPFE — Protoporphyrins, Fractionation, Whole Blood

PURINE & PYRIMIDINE METABOLISM & UREA CYCLE DISORDERS

- ☐ AAPD — Amino Acids, Quantitative, Random, Urine
- ☐ AAUCD — Amino Acids, Urea Cycle Disorders Panel, Plasma
- ☐ OAU — Organic Acids Screen, Urine
- ☐ OROT — Orotic Acid, Urine
- ☐ PUPYU — Purine and Pyrimidine Panel, Urine

WILSON DISEASE

- ☐ CUU — Copper, 24 Hour, Urine
- ☐ CUS — Copper, Serum
- ☐ WDZ — Wilson Disease, Full Gene Analysis

ADDITIONAL TESTS (INDICATE TEST NUMBER AND NAME)

Print

T798
MC0767-16A