

LABORATORY OF GENETICS AND GENOMICS

For local courier service and/or inquiries, please contact 513-636-4474 • Fax: 513-636-4373 www.cincinnatichildrens.org/moleculargenetics • Email: labgeneticcounselors@cchmc.org

Mailing Address:

3333 Burnet Avenue, Room R1042 Cincinnati, OH 45229

INBORN ERRORS OF METABOLISM TEST REQUISITION

All Information Must Be Completed Before Sample Can Be Processed

PATIENT INFORMATION	ETHNIC/RACIAL BACKGROUND (Choose All)
Patient Name:	□ European American (White) □ African-American (Black) □ Native American or Alaskan □ Asian-American □ Pacific Islander □ Ashkenazi Jewish ancestry
Home Phone: MR# Date of Birth// Gender:	□ Latino-Hispanic
BILLING INFORMATION (Cho REFERRING INSTITUTION Institution: Address: City/State/Zip: Accounts Payable Contact Name: Phone: Fax: Email: * PLEASE NOTE: • We will not bill Medicaid, Medicaid HMO, or Medicare except for the follow or Designated Regional Counties. • If you have questions, please call 1-866-450-4198 for complete details.	COMMERCIAL INSURANCE* Insurance can only be billed if requested at the time of service. Policy Holder Name:
SAMPLE/SPECIMEN INFORMATION SPECIMEN TYPE:	REFERRING PHYSICIAN Physician Name (print):

☐ Patient signed completed ABN

Medical Necessity Regulations: At the government's request, the Laboratory of Genetics and Genomics would like to remind all physicians that when ordering tests that will be paid under federal health care programs, including Medicare and Medicaid programs, that these programs will pay only for those tests the relevant program deems to be (1) included as covered services, (2) reasonable, (3) medically necessary for the treatment and diagnosis of the patient, and (4) not for screening purposes.



 \square Reflex to deletion/duplication of *G6PC* and *SLC37A4*

Patient Name:	Date of Birth:

INDICATIONS/DIAGNOSIS/ICD-9 CODE	PEDIGREE OR FAMILY HISTORY
Diagnosis/ICD-9 CODE:	Parental Consanguinity □ Y □ N
Reason for Testing:	
☐ Diagnosis in symptomatic patient	
☐ Asymptomatic infant with abnormal newborn screen	
☐ Carrier testing	
☐ Presymptomatic diagnosis of at-risk sibling	
☐ Prenatal testing (by previous arrangement only)	
☐ Family history of disease	
Please specify relationship (e.g.; cousin):	
TEST(S) RI	EQUESTED
Panels	
☐ MetaboSeq® Next Generation Sequencing Panel	Single Gene Testing
(sequencing of 56 genes including ACAD9, ACADM, ACADS, ACADVL, ACAT1, AGL, ALDOA, ALDOB, CPT1A, CPT2, DECR1, ENO3, ETFA, ETFB, ETFDH, FBP1, G6PC, GAA, GBE1, GLUD1, GYS1, GYS2, HADH, HADHA, HADHB, HMGCL, HSD17B10, LAMP2, LPIN1, MLYCD, MPI, NADK2, OXCT1, PC, PCK1, PCK2, PFKM, PGAM2, PGK1, PGM1, PHKA1, PHKA2, PHKB,	Note: Single gene sequencing is available for all genes in the MetaboSeq Panel. Please select a gene from the list below, or use the Custom Gene Sequencing section for any gene that is not specified below.
	Medium Chain ACYL-COA Dehydrogenase (MCAD) Deficiency
PHKG2, PPARG, PRKAG2, PYGL, PYGM, SLC22A5, SLC25A20, SLC2A2,	☐ ACADM (K329E) genotyping only
SLC37A4, SLC52A2, SLC52A3, TANGO2, TAZ) ☐ Reflex to deletion/duplication of ACAD9, ACADM, ACADS, ACADVL,	☐ ACADM (K329E) genotyping, with reflex to full ACADM sequencing,
ACAT1, AGL, ALDOA, ALDOB, CPT1A, CPT2, ETFA, ETFB, ETFDH, FBP1,	if indicated □ ACADM full gene sequence analysis
G6PC, GAA, GBE1, GYS2, HADH, HADHA, HADHB, HMGCL, HSD17B10, LAMP2, MLYCD, MPI, PC, PFKM, PGK1, PHKA2, PHKB, PHKG2, PPARG,	☐ Reflex to ACADM deletion/duplication analysis
PYGM, SLC22A5, SLC25A20, SLC37A4, and TAZ	Very Long Chain ACYL-COA Dehydrogenase (VLCAD) Deficiency
☐ Reflex to deletion/duplication of single gene(s)' (specify):	□ ACADVL full gene sequence analysis
	☐ Reflex to ACADVL deletion/duplication analysis
☐ Glycogen Storage Disease Gene Sequencing Panel (sequencing of 19 genes including AGL, ALDOA, ENO3, G6PC, GAA, GBE1,	Hereditary Fructose Intolerance
GYS1, GYS2, PFKM, PGAM2, PHKA1, PHKA2, PHKB, PHKG2, PRKAG2,	☐ ALDOB full gene sequence analysis
PYGL, PYGM, SLC2A2, SLC37A4)	☐ Reflex to ALDOB deletion/duplication analysis
☐ Reflex to Metaboseq panel if results are non-diagnostic	. ,
☐ Reflex to deletion/duplication of AGL, ALDOA, G6PC, GAA, GBE1, GYS2, PFKM, PHKA2, PHKB, PHKG2, PYGM, and SLC37A4	Carnitine Palmitoyltransferase 2 (CPT2) Deficiency
☐ Reflex to deletion/duplication of single gene(s)' (specify):	☐ CPT2 full gene sequencing analysis ☐ Reflex to CPT2 deletion/duplication analysis
La Renex to deletion/duplication of strigle gene(s) (specify):	
	Carnitine Deficiency, Systemic Primary (CDSP)
☐ Riboflavin Disorders Gene Sequencing Panel (sequencing of 5 genes including ETFA, ETFB, ETFDH, SLC52A2, SLC52A3)	☐ SLC22A5 full gene sequencing analysis
Reflex to Metaboseg panel if results are non-diagnostic	☐ Reflex to SLC22A5 deletion/duplication analysis
☐ Reflex to deletion/duplication of <i>ETFA</i> , <i>ETFB</i> , <i>ETFDH</i>	Pompe Disease
☐ Reflex to deletion/duplication of single gene(s)' (specify):	☐ GAA full gene sequence analysis
	☐ Reflex to GAA deletion/duplication analysis
☐ Elevated C16 Gene Sequencing Panel	$\hfill\square$ Targeted (family specific) variant analysis of genes listed above
(sequencing of SLC25A20 and CPT2)	Gene of interest
☐ Reflex to deletion/duplication of <i>SLC25A20</i> and <i>CPT2</i>	Proband's name
☐ LCHAD/TFP Gene Sequencing Panel for Long Chain 3 Hydroxyacyl CoA	Proband's DOB
Dehydrogenase (LCHAD) Deficiency / Trifunctional Protein Deficiency (TFP)	Proband's variant
(sequencing of HADHA and HADHB)	Relationship to proband
☐ Reflex to deletion/duplication of <i>HADHA</i> and <i>HADHB</i>	Please call 513-636-4474 to discuss any family-specific variant analysis
☐ GSD type I Gene Sequencing Panel (sequencing of G6PC and SLC37A4)	with genetic counselor prior to shipment.
Sequencing of Gore and Secs/A4)	If testing was \underline{not} performed at Cincinnati Children's, please include proband's

report and at least 100ng of proband's DNA to use as a positive control.



Patient Name:	Date of Birth:
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report and at least 100ng of proband's DNA to use as a positive control.

CUSTOM GENE SEQUENCING	DELETION AND DUPLICATION ASSAY	
Gene(s) to be sequenced (specify):	Gene(s) to be analyzed (specify):	
Only genes with clear published functional relationship to rare diseases are accepted.	Please see list of available genes at: www.cincinnatichildrens.org/deldup	
Suspected syndrome/condition:	Suspected syndrome/condition:	
	Please choose one of the following:	
Please choose one of the following:	☐ Deletion and duplication analysis of gene(s) specified above	
 ☐ Full gene(s) sequencing ☐ Full gene(s) sequencing with reflex to deletion and duplication analysis, if indicated (please see list of genes available for del/dup at www.cincinnatichildrens.org/deldup) 	☐ Deletion and duplication analysis of gene(s) specified above with reflex to	
	sequencing, if indicated	
	☐ Analysis of gene(s) specified above from previously analyzed deletion and duplication	
☐ Familial variant analysis	☐ Familial deletion/duplication analysis	
Proband's name:	Proband's name:	
Proband's DOB:	Proband's DOB:	
Proband's variant:		
Patient's relation to proband:	Proband's deletion/duplication:	
	Patient's relation to proband:	
If testing was <u>not</u> performed at Cincinnati Children's, please include proband's report and at least 100ng of proband's DNA to use as a positive control.	If testing was <u>not</u> performed at Cincinnati Children's, please include proband's	



☐ Progressive peripheral neuropathy

☐ Myalgias

Patient Name:	Date of Birth:

Clinical History is Required

CLINICAL HISTORY General Cardiovascular ☐ Lethargy ☐ Arrhythmia (specify type) _ □ Vomiting ☐ Failure to thrive ☐ Hypertension \square Respiratory insufficiency/failure ☐ Cardiomyopathy \square Sudden unexplained infant death ☐ Cardiomegaly □ Coma ☐ Coagulopathy ☐ Cardiac failure Metabolic ☐ Pericardial effusion ☐ Abnormal acylcarnitine profile (specify results) ___ Eye ☐ Retinopathy ☐ Abnormal newborn screen (list disease suggested) _ Liver ☐ Hypoketotic hypoglycemia \square Elevated liver enzymes \square Hyperinsulinemic hypoglycemia ☐ Liver dysfunction/failure ☐ Hypoglycemia ☐ Hepatic encephalopathy ☐ Diabetes \square Hepatomegaly/enlarged liver ☐ Lipodystrophy ☐ Reye syndrome-like phenotype \square Low ketone body formation Maternal complications during pregnancy ☐ Hyperammonemia ☐ Preeclampsia ☐ Elevated serum creatine kinase $\hfill\square$ Hyperemesis gravidarum ☐ Metabolic acidosis ☐ Acute fatty liver of pregnancy Neuro/Muscular ☐ HELLP syndrome ☐ Hypotonia Congenital abnormalities/malformations /dysmorphic features ☐ Brain dysplasia (Please specify) ☐ Skeletal/facial myopathy ☐ Exercise-induced myopathy ☐ Rhabdomyolysis ☐ Neuropathy ☐ Seizures Other Symptoms (Please specify) ☐ Choreoathetosis ☐ Developmental delay