

Newborn Screening Laboratory 465 Henry Mall Madison, WI 53706-1578 Ph: 608-262-6547 Fax: 608-262-5494

# **Laboratory Report**

James J. Schauer, Ph.D., PE, MBA, Director Errin C. Rider, Ph.D., D(ABMM),M(ASCP)CM, Director of Clinical Laboratory Services

Submitted By: REPORT SUBMITTER NBS [2130]

Ordered By: TEST, DOCTOR

Report Date: 6/3/2022

Name: Nbs, Test Baby

1234567890

Newborn Screening Report Submitter 123 Street Address City WI 53706

#### SUBMITTER PROVIDED INFORMATION

Name	Sex	Birth	Gest. Age (w)	Birthwt. (g)
NBS, TEST BABY	Female	5/2/2022 0600	40	3000
1234567890				

Birth Facility	Mother or Guardian	Primary Care Provider
NOT PROVIDED	NBS, TEST MOM	TEST, DOCTOR

### **Specimen Details**

	Туре	Collected	Received
22NB000211	Dried Blood Spot	5/3/2022 1315	5/3/2022 1315
	Repeat Specimen	Age at Collection	NBS Card No.
	No	31 hrs	U123456

## **NEWBORN SCREENING SUMMARY** (Final result)

	Result	Reference Value(s)
Aminoacidopathies	Screen negative	
Fatty Acid Oxidation (FAO) Disorders	Screen negative	
Organic Acidemias (OA)	Screen negative	
Biotinidase Deficiency	Screen negative	
Congenital Hypothyroidism	Screen negative	
Hemoglobinopathies	Screen negative	
Galactosemia	Screen negative	
Congenital Adrenal Hyperplasia (CAH)	Screen negative	
Cystic Fibrosis (CF)	Screen negative	
Severe Combined Immune Deficiency (SCID)	Screen negative	
Spinal Muscular Atrophy (SMA)	Screen negative	
Pompe Disease	Screen negative	
•		

Comments

A screen negative result indicates a low risk for the associated screened condition, but the risk is not zero. A screening test result should not be used for diagnosis. When clinical symptoms are indicated, appropriate diagnostic testing should be arranged regardless of NBS test results.

The screening tests performed on this specimen were intended for newborns. Interpretations are based on birthweight, gestational age, and age at collection. Interferences such as transfusion, parenteral nutrition/supplementation, prenatal steroid exposure, and antibiotic therapies may affect the screening test results.

The screening tests for aminoacidopathies, fatty acid oxidation disorders, organic acidemias, biotinidase deficiency, severe combined immune deficiency, spinal muscular atrophy, and the analysis of some included CFTR gene variants were developed and performance characteristics determined by WSLH. These tests have not been cleared or approved

Report ID: 6134629

Page: 1 of 2



Newborn Screening Laboratory 465 Henry Mall Madison, WI 53706-1578 Ph: 608-262-6547 Fax: 608-262-5494

Laboratory Report
James J. Schauer, Ph.D., PE, MBA, Director
Errin C. Rider, Ph.D., D(ABMM), M(ASCP)CM, Director of Clinical Laboratory Services

Name: Nbs, Test Baby

1234567890

Result Reference Value(s)

by the FDA. The laboratory is regulated under CLIA as qualified to perform high-complexity testing. These tests are used for clinical purposes and should not be regarded as investigational or for research.

For details on the conditions screened, biomarkers, test methods, and reference values, refer to the WSLH website at www.slh.wisc.edu/newborn.

Condition(s) Screened	Method(s)	Biomarker(s)	Reference Value(s)
Aminoacidopathies	1st Tier: MS/MS 2nd Tier: LC-MS/MS	Amino acids	See: www.slh.wisc.edu/newborn
Fatty Acid Oxidation (FAO) Disorders	1st Tier: MS/MS 2nd Tier: LC-MS/MS	Acylcarnitine profile	See: www.slh.wisc.edu/newborn
Organic Acidemias (OA)	1st Tier: MS/MS 2nd Tier: LC-MS/MS	1st Tier: Acylcarnitine profile 2nd Tier: Organic acids	See: www.slh.wisc.edu/newborn
Galactosemia	1st Tier: Enzyme assay	1st Tier: Galactose-1-phosphate uridyl-1-transferase (GALT) activity	1st Tier: >3.0 U/g Hb
	2nd Tier: Enzyme assay	2nd Tier: Total galactose	2nd Tier: <6.0 mg/dL
Biotindase Deficiency	Enzyme assay	Biotinidase activity	Present
Congenital Hypothyroidism (CH)	Immunoassay	Thyroid Stimulating Hormone (TSH)	0-96h: <50 ulU/mL 97-312h: <17 ulU/mL >313h: <15 ulU/mL
Congenital Adrenal Hyperplasia (CAH)	1st Tier: Immunoassay 2nd Tier: LC-MS/MS	1st Tier: 17-Hydroxyprogesterone (17-OHP) 2nd Tier: steroid profile	Age- and birthweight-dependent (See: www.slh.wisc.edu/newborn)
Hemoglobinopathies	1st Tier: IEF 2nd Tier: HPLC	Hemoglobin (Hgb) fractions	Presence of fetal and adult Hgb
Cystic Fibrosis (CF)	1st Tier. Immunoassay 2nd Tier. Next Generation Sequencing	1st Tier: Immunoreactive Trypsinogen (IRT) 2nd Tier: <i>CFTR</i> gene variants	1st Tier: <170 ng/mL 2nd Tier: None detected
Severe Combined Immune Deficiency (SCID)	Real-Time PCR	T-cell Receptor Excision Circles (TREC)	≤1.079 MoM
Spinal Muscular Atrophy (SMA)	Real-Time PCR	Functional SMN1 exon 7	Present
Pompe Disease	Enzyme assay and MS/MS	Acid alpha glucosidase (GAA) activity	>15% of the daily median

Report ID: 6134629

Page: 2 of 2

<sup>\*\*\*</sup>END OF REPORT\*\*\*