Test Definition: HCMM Homocysteine (Total), Methylmalonic Acid, and Methylcitric Acid,

Blood Spot

Reporting Title: HCMM, BS

MAYO CLINIC

BORATORIES

Performing Location: Rochester

Ordering Guidance:

The preferred test for evaluating adults for an inherited disorder of methionine, cobalamin, or propionate metabolism is CMMPP / Cobalamin, Methionine, and Methylmalonic Acid Pathways, Plasma or CMMPS / Cobalamin, Methionine, and Methylmalonic Acid Pathways, Serum.

Specimen Requirements:

Supplies: Card-Blood Spot Collection (Filter Paper) (T493)

Container/Tube:

Preferred: Card-Blood Spot Collection (Filter Paper)

Acceptable: Local newborn screening card, Whatman Protein Saver 903 filter paper, PerkinElmer 226 (formerly Ahlstrom 226) filter paper, Munktell filter paper

Specimen Volume: 2 Blood spots

Collection Instructions:

1. Do not use device or capillary tube containing EDTA or ACD to collect specimen. Sodium heparin is acceptable but must be spotted on card the same day as collected.

2. Completely fill at least 2 circles on the filter paper card (approximately 100 microliters blood per circle) using blood from a heel or finger stick.

3. Let blood dry on filter paper at ambient temperature in a horizontal position for a minimum of 3 hours.

4. Do not expose specimen to heat or direct sunlight.

5. Do not stack wet specimens.

6. Keep specimen dry.

Additional Information:

1. For collection instructions, see Blood Spot Collection Instructions

2. For collection instructions in Spanish, see Blood Spot Collection Card-Spanish Instructions (T777)

3. For collection instructions in Chinese, see Blood Spot Collection Card-Chinese Instructions (T800)

Specimen Minimum Volume:

1 Blood spot

Forms:

1. Biochemical Genetics Patient Information (T602)

2. If not ordering electronically, complete, print, and send a Biochemical Genetics Test Request (T798) with the specimen.

Specimen Type	Temperature	Time	Special Container	
Whole blood	Ambient (preferred)		FILTER PAPER	

 MAYOCLINIC
 Test Definition: HCMIN

 LABORATORIES
 Homocysteine (Total), Methylmalonic Acid, and Methylcitric Acid, Blood Spot
Blood Spot

	Frozen	FILTER PAPER
	Refrigerated	FILTER PAPER

Result Codes:

Result ID	Reporting Name	Туре	Unit	LOINC®
50252	Homocysteine	Numeric	nmol/mL	54301-7
50253	Methylmalonic Acid	Numeric	nmol/mL	82385-6
50254	Methylcitric Acid	Numeric	nmol/mL	82386-4
50255	Interpretation	Alphanumeric		59462-2
50257	Reviewed By	Alphanumeric		18771-6

LOINC and CPT codes are provided by the performing laboratory.

Supplemental Report:

No

CPT Code Information:

83090 83918

Reference Values:

HOMOCYSTEINE: <9.0 nmol/mL

METHYLMALONIC ACID: <4.0 nmol/mL

METHYLCITRIC ACID: <1.0 nmol/mL

An interpretive report will also be provided.