

Reporting Title: HCMM, BS  
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, Munktel 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)

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
	Frozen		FILTER PAPER
	Refrigerated		FILTER PAPER

Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
50252	Homocysteine	Numeric	nmol/mL	54301-7

Test Definition: HCMM

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

50253	Methylmalonic Acid	Numeric	nmol/mL	82385-6
50254	Methylcitric Acid	Numeric	nmol/mL	82386-4
50257	Reviewed By	Alphanumeric		18771-6
50255	Interpretation	Alphanumeric		59462-2

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.