



Homocysteine, Total, Plasma

Patient ID SA00124061	Patient Name TESTINGRNV, SAMPLEREPORT		Birth Date 1982-06-29	Gender <b>F</b>	Age 37
Order Number SA00124061	Client Order Number SA00124061	Ordering Physician CLIENT,CLIENT	Report Notes		
Account Information C7028846 DLMP Rochest	er	Collected 14 Nov 2019 13:00			

## Homocysteine, Total, P

1 MCR

37.5 nmol/mL

Reference Value 4.6–12.5

\*POSITIVE\* In this sample, the concentration of homocysteine was elevated. Elevated homocysteine has been associated with an increased risk of cardiovascular disease, cerebrovascular disease, peripheral arterial disease and thrombosis. Vitamin deficiencies (B6, B12 and folic acid) may result in elevated homocysteine concentration. In addition, disorders of methionine metabolism such as homocystinuria (cystathionine beta synthase deficiency), methylene tetrahydrofolate reductase deficiency (MTHFR) or inherited defect in cobalamin metabolism can also result in elevated

homocysteine concentration. Hyperhomocysteinemia may also be a contributing factor in the pathogenesis of neural tube defects. We recommend laboratory evaluation to include determination of vitamin B12 and folate levels, plasma amino acids, acylcarnitine profile, methylmalonic acid, and urine organic acid analyses. We need clinical information to provide further interpretation.

## ADDITIONAL INFORMATION

Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS)

**Received:** 15 Nov 2019 13:37 **Reported:** 15 Nov 2019 13:46

## **Laboratory Notes**

1 This test was developed and its performance characteristics determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the U.S. Food and Drug Administration.

## **Performing Site Legend**

Code	Laboratory	Address	Lab Director	CLIA Certificate
MCR	Mayo Clinic Laboratories - Rochester Main Campus	200 First Street SW, Rochester, MN 55905	William G. Morice M.D. Ph.D	24D0404292