



Anti-MTRR (aa 1-110) polyclonal antibody (DPAB-DC1968)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	Methionine is an essential amino acid required for protein synthesis and one-carbon metabolism. Its synthesis is catalyzed by the enzyme methionine synthase. Methionine synthase eventually becomes inactive due to the oxidation of its cob(I)alamin cofactor. The protein encoded by this gene regenerates a functional methionine synthase via reductive methylation. It is a member of the ferredoxin-NADP(+) reductase (FNR) family of electron transferases. Patients of the cbl-E complementation group of disorders of folate/cobalamin metabolism are defective in reductive activation of methionine synthase. Alternative splicing of this gene results in multiple transcript variants encoding distinct isoforms.
Immunogen	MTRR (NP_002445, 1 a.a. ~ 110 a.a) partial recombinant protein with GST tag. The sequence is MRRFLLLYATQQGQAKAIAEEMCEQAVVHGFSA DLHCISESDKYDLKTETAPLVVVVSTT GTGDPPDTARKFVKEIQNQTLPVDFFAHLRYGLLGLGDSEYTYFCNGGKI
Source/Host	Mouse
Species Reactivity	Human
Conjugate	Unconjugated
Applications	WB (Recombinant protein), ELISA,
Size	50 µl
Buffer	50 % glycerol
Preservative	None
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

GENE INFORMATION

Gene Name	MTRR 5-methyltetrahydrofolate-homocysteine methyltransferase reductase [Homo sapiens (human)]
Official Symbol	MTRR
Synonyms	MTRR; 5-methyltetrahydrofolate-homocysteine methyltransferase reductase; MSR; cbIE; methionine synthase reductase; methionine synthase reductase, mitochondrial; [methionine synthase]-cobalamin methyltransferase (cob(II)alamin reducing);
Entrez Gene ID	4552
Protein Refseq	NP_002445
UniProt ID	Q9UBK8
Chromosome Location	5p15.31
Pathway	Biological oxidations; Defective AMN causes hereditary megaloblastic anemia 1; Defective CD320 causes methylmalonic aciduria; Defective GIF causes intrinsic factor deficiency
Function	FMN binding; NADP binding; NOT NADPH-hemoprotein reductase activity; [methionine synthase] reductase activity