

Product datasheet for TP300297L

MTHFD1 (NM_005956) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1, methenyltetrahydrofolate cyclohydrolase, formyltetrahydrofolate synthetase (MTHFD1), 1 mg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC200297 protein sequence Red=Cloning site Green=Tags(s)

MAPAEILNGKEISAIQIRARLKNQVTQLKEQVPGFTPRLAILQVGNRDDSPLYINVKLKAEEIGIKATHI
KLPRTTTESEVMKYITSLNEDSTVHGFLVQLPLDSENSINTEEVINAIPEKDVDGLTSINAGRLARGDL
NDCFIPCTPKGCLELIKETGVPIAGRHAVVVGSRKIVGAPMHDLLLWNNATVTTCHSKTAHLDEEVNKGD
ILVATGQPEMVKGWIKPGAVIDCGINYVPDDKKPNGRKKVVDVAYDEAKERASFITVPPGGVGPMTV
AMLMQSTVESAKRFLEKFKPGKWWMIQYNNLNLKTPVPSDIDISRSCKPKPIGKLAREIGLLSEEVLYGE
TKAKVLLSALERLKHDPDGKYVVVTGITPTPLGEGKSTTTIGLVQALGAHLYQNVFACVRQPSQGPTEFI
KGGAAAGGGYSQVIPMEEFNLHLTGDIHAITAANNLVAAAIDARIFHELTQTDKALFNRLVPSVNGVRRFS
DIQIRRLKRLGIEKTDPTTLTDEEINRFARLDIDPETITWQRVLDTNDRFLRKITIGQAPTEKGHTRTAQ
FDSVASEIMAVLALTTSLDMRERLKGMMVASSKKGEPVSAEDLGVSALTVMKDAIKPNLMQTLGTE
PVFVHAGPFANIAHGNSSIIADQIALKLVGPEGFVTEAGFGADIGMEKFFNIKCRYSGLCPHVWLVAT
VRALKMHGGGPTVTAGLPLPKAYIQENLELVEKGFNSLKKQIENARMFGIPVVAVNAFKTDTESELDLI
SRLSREHGAFDAVKCTHWAEGGKALALAAQAVQRAAQAPSSFQLLYDLKLPVEDKIRIIAQKIYGADDIE
LLPEAQHKAEVYTKQGFGNLPCMAKTHLSLSHNPEQKGVPTGFILPDIRASVAGFLYPLVGTMTSTM
PGLPTRPCFYDIDLDPETEQVNGLF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

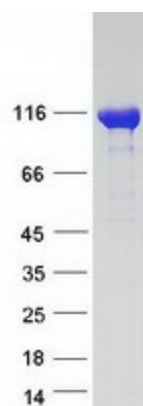
Tag:	C-Myc/DDK
Predicted MW:	101.4 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol



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Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_005947
Locus ID:	4522
UniProt ID:	P11586 , A0A384N5Y3
RefSeq Size:	3466
Cytogenetics:	14q23.3
RefSeq ORF:	2805
Synonyms:	CIMAH; MTHFC; MTHFD
Summary:	This gene encodes a protein that possesses three distinct enzymatic activities, 5,10-methylenetetrahydrofolate dehydrogenase, 5,10-methenyltetrahydrofolate cyclohydrolase and 10-formyltetrahydrofolate synthetase. Each of these activities catalyzes one of three sequential reactions in the interconversion of 1-carbon derivatives of tetrahydrofolate, which are substrates for methionine, thymidylate, and de novo purine syntheses. The trifunctional enzymatic activities are conferred by two major domains, an aminoterminal portion containing the dehydrogenase and cyclohydrolase activities and a larger synthetase domain. [provided by RefSeq, Jul 2008]
Protein Families:	Druggable Genome, Stem cell - Pluripotency
Protein Pathways:	Glyoxylate and dicarboxylate metabolism, Metabolic pathways, One carbon pool by folate

Product images:



Coomassie blue staining of purified MTHFD1 protein (Cat# [TP300297]). The protein was produced from HEK293T cells transfected with MTHFD1 cDNA clone (Cat# [RC200297]) using MegaTran 2.0 (Cat# [TT210002]).