

Product datasheet for TP308588M

OriGene Technologies, Inc.

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MTHFR (NM_005957) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human 5,10-methylenetetrahydrofolate reductase (NADPH) (MTHFR),

100 µg

Species: Human Expression Host: HEK293T

Expression cDNA Clone >RC208588 representing NM_005957

or AA Sequence: Red=Cloning site Green=Tags(s)

MVNEARGNSSLNPCLEGSASSGSESSKDSSRCSTPGLDPERHERLREKMRRRLESGDKWFSLEFFPPRTA EGAVNLISRFDRMAAGGPLYIDVTWHPAGDPGSDKETSSMMIASTAVNYCGLETILHMTCCRQRLEEITG HLHKAKQLGLKNIMALRGDPIGDQWEEEEGGFNYAVDLVKHIRSEFGDYFDICVAGYPKGHPEAGSFEAD LKHLKEKVSAGADFIITQLFFEADTFFRFVKACTDMGITCPIVPGIFPIQGYHSLRQLVKLSKLEVPQEI KDVIEPIKDNDAAIRNYGIELAVSLCQELLASGLVPGLHFYTLNREMATTEVLKRLGMWTEDPRRPLPWA LSAHPKRREEDVRPIFWASRPKSYIYRTQEWDEFPNGRWGNSSSPAFGELKDYYLFYLKSKSPKEELLKM WGEELTSEASVFEVFVLYLSGEPNRNGHKVTCLPWNDEPLAAETSLLKEELLRVNRQGILTINSQPNING KPSSDPIVGWGPSGGYVFQKAYLEFFTSRETAEALLQVLKKYELRVNYHLVNVKGENITNAPELQPNAVT WGIFPGREIIQPTVVDPVSFMFWKDEAFALWIEQWGKLYEEESPSRTIIQYIHDNYFLVNLVDNDFPLDN

CLWQVVEDTLELLNRPTQNARETEAP

TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Tag: C-Myc/DDK
Predicted MW: 74.4 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

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.





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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 005948

Locus ID: 4524

UniProt ID: <u>P42898</u>, <u>Q8IU67</u>, <u>Q59GJ6</u>

RefSeq Size: 6099

Cytogenetics: 1p36.22 RefSeq ORF: 1968

Summary: The protein encoded by this gene catalyzes the conversion of 5,10-methylenetetrahydrofolate

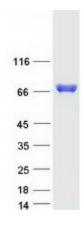
to 5-methyltetrahydrofolate, a co-substrate for homocysteine remethylation to methionine. Genetic variation in this gene influences susceptibility to occlusive vascular disease, neural tube defects, colon cancer and acute leukemia, and mutations in this gene are associated with

methylenetetrahydrofolate reductase deficiency.[provided by RefSeq, Oct 2009]

Protein Families: Druggable Genome

Protein Pathways: Metabolic pathways, Methane metabolism, One carbon pool by folate

Product images:



Coomassie blue staining of purified MTHFR protein (Cat# [TP308588]). The protein was produced from HEK293T cells transfected with MTHFR cDNA clone (Cat# [RC208588]) using

MegaTran 2.0 (Cat# [TT210002]).