

Datasheet for ABIN7552751
MTHFD1 Protein (AA 1-935) (His tag)



[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	MTHFD1
Protein Characteristics:	AA 1-935
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This MTHFD1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant MTHFD1 Protein expressed in mammalian cells.
Sequence:	MAPAEILNGK EISAQIRARL KNQVTQLKEQ VPGFTPRLAI LQVGNRDDSN LYINVKLKAA EEIGIKATHI KLPRTTTESE VMKYITSLNE DSTVHGFLVQ LPLDSENSIN TEEVINAIAIP EKDVDGLTSI NAGKLARGDL NDCFIPCTPK GCLELIKETG VPIAGRHAVV VGRSKIVGAP MHDLLLWNNNA TVTTCHSKTA HLDEEVNKGD ILVVATGQPE MVKGEWIKPG AIVIDCGINY VPDDKKPNGR KVVGDVAYDE AKERASFITP VPGGVGPM TV AMLMQSTVES AKRFLEKFKP GKWMIQYNNL NLKTPVPSDI DISRCKPKP IGLKAREIGL LSEEVELYGE TKAKVLLSAL ERLKHDPDGK YVVVTGITPT PLGEGKSTTT IGLVQALGAH LYQNVFACVR QPSQGPTFGI KGG AAGGGYS QVIPMEEFNL HLTGDIHAIT AANNLVAAA I DARIFHELTQ TDKALFNRLV PSVNGVRRFS DIQIRRLKRL GIEKTDPTTL TDEEINRFAR LDIDPETITW QRVLDTNDRF LRKITIGQAP TEKGHTRTAQ FDISVASEIM AVLALTTSL E DMRERLGKMV VASSKKGEPV SAEDLGVSGA LTVLMKDAIK PNLMQTLEGT PVFVHAGPFA NIAHGNSSII ADRIALKLVG PEGFVVTEAG FGADIGMEKF FNIKCRYSGL CPHVVVLVAT VRALKMHGGG PTVTAGLPLP

Product Details

KAYIQENLEL VEKGFNSLKK QIENARMFGI PWWAVNAFK TDTSELDLI SRLSREHGAF
DAVKCTHWAE GKGALALAQ AVQRAAQAPS SFQLLYDLKL PVEDKIRIIA QKIYGADDIE
LLPEAQHKAE VYTKQGFGNL PICMAKTHLS LSHNPEQKGV PTGFILPIRD IRASVGAGFL
YPLVGTMSTM PGLPTRPCFY DIDLDPETE QVNGLF **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**

Specificity: If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.

Characteristics: **Key Benefits:**

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity: > 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade: custom-made

Target Details

Target: MTHFD1

Alternative Name: MTHFD1 ([MTHFD1 Products](#))

Background: C-1-tetrahydrofolate synthase, cytoplasmic (C1-THF synthase) (Epididymis secretory sperm binding protein) [Cleaved into: C-1-tetrahydrofolate synthase, cytoplasmic, N-terminally processed] [Includes: Methylenetetrahydrofolate dehydrogenase (EC 1.5.1.5), Methenyltetrahydrofolate cyclohydrolase (EC 3.5.4.9), Formyltetrahydrofolate synthetase (EC

Target Details

6.3.4.3)],FUNCTION: Trifunctional enzyme that catalyzes the interconversion of three forms of one-carbon-substituted tetrahydrofolate: (6R)-5,10-methylene-5,6,7,8-tetrahydrofolate, 5,10-methenyltetrahydrofolate and (6S)-10-formyltetrahydrofolate (PubMed:1881876, PubMed:10828945, PubMed:18767138). These derivatives of tetrahydrofolate are differentially required in nucleotide and amino acid biosynthesis, (6S)-10-formyltetrahydrofolate being required for purine biosynthesis while (6R)-5,10-methylene-5,6,7,8-tetrahydrofolate is used for serine and methionine biosynthesis for instance (PubMed:25633902, PubMed:18767138). {ECO:0000269|PubMed:10828945, ECO:0000269|PubMed:18767138, ECO:0000269|PubMed:1881876, ECO:0000269|PubMed:25633902}.

Molecular Weight: 101.5 kDa

UniProt: [P11586](#)

Pathways: [Methionine Biosynthetic Process](#)

Application Details

Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months