Datasheet for ABIN7554552

MTR Protein (AA 1-1265) (His tag)

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Overview

Quantity:	1 mg
Target:	MTR
Protein Characteristics:	AA 1-1265
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This MTR protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Purpose:	Custom-made recombinat MTR Protein expressed in mammalien cells.
Sequence:	MSPALQDLSQ PEGLKKTLRD EINAILQKRI MVLDGGMGTM IQREKLNEEH FRGQEFKDHA RPLKGNNDIL SITQPDVIYQ IHKEYLLAGA DIIETNTFSS TSIAQADYGL EHLAYRMNMC SAGVARKAAE EVTLQTGIKR FVAGALGPTN KTLSVSPSVE RPDYRNITFD ELVEAYQEQA KGLLDGGVDI LLIETIFDTA NAKAALFALQ NLFEEKYAPR PIFISGTIVD KSGRTLSGQT GEGFVISVSH GEPLCIGLNC ALGAAEMRPF IEIIGKCTTA YVLCYPNAGL PNTFGDYDET PSMMAKHLKD FAMDGLVNIV GGCCGSTPDH IREIAEAVKN CKPRVPPATA FEGHMLLSGL EPFRIGPYTN FVNIGERCNV AGSRKFAKLI MAGNYEEALC VAKVQVEMGA QVLDVNMDDG MLDGPSAMTR FCNLIASEPD IAKVPLCIDS SNFAVIEAGL KCCQGKCIVN SISLKEGEDD FLEKARKIKK YGAAMVVMAF DEEGQATETD TKIRVCTRAY HLLVKKLGFN PNDIIFDPNI LTIGTGMEEH NLYAINFIHA TKVIKETLPG ARISGGLSNL SFSFRGMEAI REAMHGVFLY HAIKSGMDMG IVNAGNLPVY DDIHKELLQL CEDLIWNKDP EATEKLLRYA QTQGTGGKKV

Product Details

	IQTDEWRNGP VEERLEYALV KGIEKHIIED TEEARLNQKK YPRPLNIIEG PLMNGMKIVG DLFGAGKMFL PQVIKSARVM KKAVGHLIPF MEKEREETRV LNGTVEEEDP YQGTIVLATV KGDVHDIGKN IVGVVLGCNN FRVIDLGVMT PCDKILKAAL DHKADIIGLS GLITPSLDEM IFVAKEMERL AIRIPLLIGG ATTSKTHTAV KIAPRYSAPV IHVLDASKSV VVCSQLLDEN LKDEYFEEIM EEYEDIRQDH YESLKERRYL PLSQARKSGF QMDWLSEPHP VKPTFIGTQV FEDYDLQKLV DYIDWKPFFD VWQLRGKYPN RGFPKIFNDK TVGGEARKVY DDAHNMLNTL ISQKKLRARG VVGFWPAQSI QDDIHLYAEA AVPQAAEPIA TFYGLRQQAE KDSASTEPYY CLSDFIAPLH SGIRDYLGLF AVACFGVEEL SKAYEDDGDD YSSIMVKALG DRLAEAFAEE LHERVRRELW AYCGSEQLDV ADLRRLRYKG IRPAPGYPSQ PDHTEKLTMW RLADIEQSTG IRLTESLAMA PASAVSGLYF SNLKSKYFAV GKISKDQVED YALRKNISVA EVEKWLGPIL GYDTD **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.**
Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalien 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, Western Blot
Grade:	custom-made

Target Details

Target:	MTR
Alternative Name:	MTR (MTR Products)

Target Details

Background:	Methionine synthase (MS) (EC 2.1.1.13) (5-methyltetrahydrofolate--homocysteine methyltransferase) (Cobalamin-dependent methionine synthase) (Vitamin-B12 dependent methionine synthase),FUNCTION: Catalyzes the transfer of a methyl group from methylcob(III)alamin (MeCbl) to homocysteine, yielding enzyme-bound cob(I)alamin and methionine in the cytosol (PubMed:16769880, PubMed:27771510, PubMed:17288554). MeCbl is an active form of cobalamin (vitamin B12) used as a cofactor for methionine biosynthesis. Cob(I)alamin form is regenerated to MeCbl by a transfer of a methyl group from 5-methyltetrahydrofolate (PubMed:16769880, PubMed:27771510, PubMed:17288554). The processing of cobalamin in the cytosol occurs in a multiprotein complex composed of at least MMACHC, MMADHC, MTRR (methionine synthase reductase) and MTR which may contribute to shuttle safely and efficiently cobalamin towards MTR in order to produce methionine (PubMed:16769880, PubMed:27771510). {ECO:0000269|PubMed:16769880, ECO:0000269|PubMed:17288554, ECO:0000269|PubMed:27771510}.
Molecular Weight:	140.5 kDa
UniProt:	Q99707
Pathways:	Methionine Biosynthetic Process

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. 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