

Product datasheet for **TP307185M**

YTHDF1 (NM_017798) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human YTH domain family, member 1 (YTHDF1), 100 µg

Species: Human

Expression Host: HEK293T

Expression cDNA >RC207185 protein sequence

Clone or AA Red=Cloning site Green=Tags(s)

Sequence:

MSATSVDTQRTKGQDNKVQNGSLHQKDTVHDNDFEPYLTGQSNQSNYSYSPMSDPYLSSYPPSIGFPYSL
NEAPWSTAGDPPPIPYLTTYGQLSNGDHHFMHDAVFGQPGGLGNNIYQHRFNFFPENPAFSAWGTSGSQGQ
QTQSSAYGSSYTYPPSSLGGTVVDGQPGFHSDTLSKAPGMNSLEQGMVGLKIGDVSSSAVKTVGSVSSV
ALTGVLSGNGGTNVNMPVSKPTSWAAIASKPAKPQPKMKTSGPVMGGGLPPPIKHNM DIGTWDNKG PV
PKAPVPQQAPSPQAAPQPQQVAQPLPAQPPALAQPYQSPQPPQTRWVAPRNRNAAFGQSGGAGSDSNS
PGNVQPNSAPSVESHVPLEKLKAAHSYNPKFEWNLKSGRVFIKSYSEDDIHRSIKYSIWCSTEHGNKR
LDSAFRCMSSKGPVYLLFSVNGSGHFHFCGVAEMKSPVDYGTSAQVWSQDKWKGKFDVQWIFVKDVPNNQLR
HIRLENNDNKPV TNSRDTQEVPLEKAKQVLKISSYKHTTSIFDDFAHYEKRQEEEEVVRKERQSRNKQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

Predicted MW: 60.7 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.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.



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RefSeq: [NP_060268](#)

Locus ID: 54915

UniProt ID: [Q9BYJ9](#)

RefSeq Size: 3277

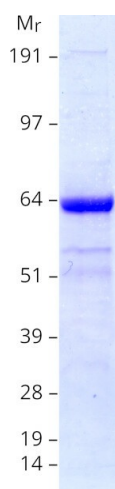
Cytogenetics: 20q13.33

RefSeq ORF: 1677

Synonyms: C20orf21

Summary: Specifically recognizes and binds N6-methyladenosine (m6A)-containing mRNAs, and promotes mRNA translation efficiency (PubMed:24284625, PubMed:26046440, PubMed:26318451). M6A is a modification present at internal sites of mRNAs and some non-coding RNAs and plays a role in the efficiency of mRNA splicing, processing and stability (PubMed:24284625). Acts as a regulator of mRNA translation efficiency: promotes ribosome loading to m6A-containing mRNAs and interacts with translation initiation factors eIF3 (EIF3A or EIF3B) to facilitate translation initiation (PubMed:26046440). Required to facilitate learning and memory formation in the hippocampus by enhancing protein synthesis upon neuronal stimulation: in response to neuronal stimulation, binds to m6A-containing neuronal mRNAs, promoting their translation, thereby contributing to learning and memory (By similarity). Acts as a regulator of axon guidance by binding to m6A-containing ROBO3 transcripts, thereby promoting their translation (By similarity). Acts as a negative regulator of antigen cross-presentation in myeloid dendritic cells (By similarity). Acts by binding and promoting translation of m6A-containing transcripts encoding proteins involved in lysosomal degradation and phagosome maturation, leading to increased antigen degradation in myeloid dendritic cells (By similarity). In the context of tumorigenesis, negative regulation of antigen cross-presentation limits the anti-tumor response by reducing efficiency of tumor-antigen cross-presentation (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Coomassie blue staining of purified YTHDF1 protein (Cat# [TP307185]). The protein was produced from HEK293T cells transfected with YTHDF1 cDNA clone (Cat# [RC207185]) using MegaTran 2.0 (Cat# [TT210002]).