

Product datasheet for PH307185

YTHDF1 (NM_017798) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	YTHDF1 MS Standard C13 and N15-labeled recombinant protein (NP_060268)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC207185
Predicted MW:	60.9 kDa
Protein Sequence:	>RC207185 protein sequence Red =Cloning site Green =Tags(s)

MSATSVDTQRTKGQDNKVQNGSLHQKDTVHDNDFEPYLTGQSNQSNYSYSPMSDPYLSSYYPPSIGFPYSL
 NEAPWSTAGDPPIPYLTTYGQLSNGDHHFMHDAVFGQPGGLGNNIYQHRFNFFPENPAFSAWGTSGSQGQ
 QTQSSAYGSSYTPPSSLGGTVVDGQPGFHSDTLSKAPGMNSLEQGMVGLKIGDVSSSAVKTVGSVYSSV
 ALTGVLSGNGGTNVNMPVSKPTSWAAIASKPAKPQPKMKTSGPVMGGGLPPPIKHNMDIGTWDNKGVP
 PKAPVPQQAPSPQAAPQPQQAQPLPAQPPALAQPYQSPQPPQTRWVAPRNRNAAFQSGGAGSDSNS
 PGNVQPNAPSVEHPVLEKLKAAHSYNPKEFEWNLKSGRVFIIKSYSEDDIHRSIKYSIWCSTEHNKR
 LDSAFRCMSSKGPVYLLFSVNGSGHFCGVAEMKSPVDYGTSAQVWSQDKWKGKFDVQWIFVKDVPNNQLR
 HIRLENNDNKPVNTSRDTQEVPLEKAKQVLKIISSYKHTTSIFDDFAHYEKRQEEEEVVRKERQSRNKQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

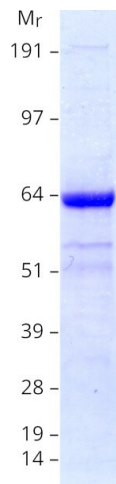
Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<u>NP_060268</u>
RefSeq Size:	3277
RefSeq ORF:	1677


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Synonyms: C20orf21
Locus ID: 54915
UniProt ID: [Q9BYJ9](#)
Cytogenetics: 20q13.33

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]).