

Product datasheet for TP312877M

EIF4G1 (NM_004953) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Homo sapiens eukaryotic translation initiation factor 4 gamma, 1 (EIF4G1), transcript variant 5, 100 µg

Species: Human

Expression Host: HEK293T

Expression cDNA Clone or AA Sequence: >RC212877 representing NM_004953
Red=Cloning site Green=Tags(s)

MSGARTASTPTPPQTGGGLEPQANGETPQVAVIVRPDDRSQGAIIDRPGLPGPEHSPSESQPSSPSPTP
SPSPVLEPGSEPNLAVLSIPGDTMTTIQMSVEESTPISRETGEPYRLSPEPTPLAEPILVEVTLKVPV
ESEFSSSLQAPTPLASHTVEIHEPNGMVPSEDLPEVESSPELAPPACSPESPVPIAPTAQPEELLNG
APSPPAVDLSPVSEPEEQAKEVTASVAPPTIPSATPATAPSATSPAQEEEMEEEEEEEGEAGEAGEAES
EKGGEELLPESTPIPANLSQNLEAAAATQVAVSVPKRRRKIKELNKKEAVGDLLDAFKEANPAVPEVEN
QPPAGSNPGPESESGVPPRPEEADETWDSKEDIHNAENIQPGEQKYEYKSDQWKPLNLEEKRYDREF
LLGFQFIFASMQKPEGLPHISDVLDKANKTPLRPLDPTLQGINCGPDTFSPANLGRITLSTRGPPRG
GPGGELPRGPAGLPRRSQQGPRKEPRKIATVLMTEDIKLNKAEKAWKPSSKRTAADKDRGEEDADGSK
TQDLFRRVRSILNKLTQMFMQQLMKQVTLAIDTEERLKGVIDLIFEKAISEPNFSVAYANMCRCLMALK
VPTTEKPTVTNFRKLLLNRCQKEFEKDKDDDEVFEKKQKEMDEAATAEERGLKEELEEARDIARRRSL
GNIKFIGELFKLMLTEAIMHDCVWLLKNHDEESLECLCRLLTTIGKDLDFEKAKPRMDQYFNQMEKII
KEKKTSSRIRFMLQDVLDLRGSNWVPRRGDQGPKTIDQIHKEAEMEEHREHIKVVQLMAKGS DKRRGGPP
GPPISRGLPLVDDGGWNTVPISKGSRPIDTSRLTKITKPGSIDSNNQLFAPGGRLSWGKGS SGGSGAKPS
DAASEAARPATSTLNRFSAALQAVPTTESTDNRRVVQRSSLSRERGEKAGDRGDRLE R SERGGDRGDRLDR
ARTPATKRSFSKEVEERSRERPSQPEGLRKAASLTEDRDRGRDAVKREAAALPPVSPLKAALSEEELEKKS
KAIIEEYLHLNDMKEAVQCQVELASPSLLFIVVRHGVSTLERSAIAREHMGQLLHQLLCAGHLSTAQYY
QGLYEILELAEDMEIDIPHWLYLAELVTPILQEGGVPMGELFREITKPLRPLGKAASLLLEILGLLCKS
MGPKKVGT LWREAGLSWKEFLPEGQDIGAFVAEQKVEYTLGEESEAPGQRALPSEELNRQLEKLLKEGSS
NQRVFDWIEANLSEQQIVSNTLVRALMTAVCYSIIIFETPLRVDVAVLKARAKLLQKYLCD EQKELQALY
ALQALVVTLEQPPNLLRMFFDALYDEDVVKEDAFYSWESSKDPAEQGKGVALKSVTAFFKWLREAE EES
DHN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

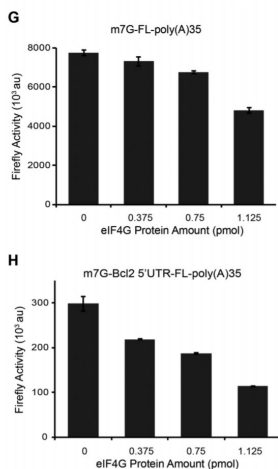
Tag: C-Myc/DDK



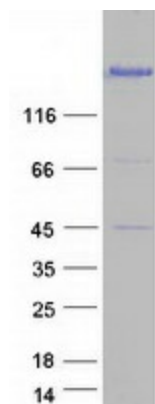
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Predicted MW:	154.6 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Bioactivity:	In vitro translation assay (PMID: 25779044)
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.
RefSeq:	NP_004944
Locus ID:	1981
UniProt ID:	Q04637
RefSeq Size:	5045
Cytogenetics:	3q27.1
RefSeq ORF:	4209
Synonyms:	EIF-4G1; EIF4F; EIF4G; EIF4GI; P220; PARK18
Summary:	The protein encoded by this gene is a component of the multi-subunit protein complex EIF4F. This complex facilitates the recruitment of mRNA to the ribosome, which is a rate-limiting step during the initiation phase of protein synthesis. The recognition of the mRNA cap and the ATP-dependent unwinding of 5'-terminal secondary structure is catalyzed by factors in this complex. The subunit encoded by this gene is a large scaffolding protein that contains binding sites for other members of the EIF4F complex. A domain at its N-terminus can also interact with the poly(A)-binding protein, which may mediate the circularization of mRNA during translation. Alternative splicing results in multiple transcript variants, some of which are derived from alternative promoter usage. [provided by RefSeq, Aug 2010]
Protein Pathways:	Viral myocarditis

Product images:



Recombinant eIF4G1 fails to stimulate cap-dependent translation. Translation of m7GpppG-FL-poly (A)₃₅ and m7GpppG-Bcl2 5'UTR-FL-poly (A)₃₅ was determined in nuclease-untreated rabbit reticulocyte lysates supplemented with the indicated amounts (pmol) of the full-length eIF4G1 (OriGene [TP312877]). Figure cited from *Nucleic Acids Res*, PMID: 25779044



Coomassie blue staining of purified EIF4G1 protein (Cat# [TP312877]). The protein was produced from HEK293T cells transfected with EIF4G1 cDNA clone (Cat# [RC212877]) using MegaTran 2.0 (Cat# [TT210002]).