

Product datasheet for **TP314993L**

PERK (EIF2AK3) (NM_004836) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human eukaryotic translation initiation factor 2-alpha kinase 3 (EIF2AK3), 1 mg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC214993 representing NM_004836 Red =Cloning site Green =Tags(s)

MERAISPGLLVRALLLLLLLGLAARTVAAGRARGLPAPTAEAAFGLGAAAAPTSTRVPAAGAVAAAEEV
TVEDAEALPAAAGEQEPRGPEPDDTELPRGRSLVIISTLDGRIAALDPENHGKKQWDLVDVSGSLVSS
SLSKPEVFGNKMIIPSLDGALFQWDRDRESMETVPFTVESLLESSYKFGDDVVLVGGKSLTTYGLSAYSG
KVRYICSALGCRQWDSDEMEQEEDILLQRTQKTVRAVGPRSGNEKWNFVSVGHFELRYIPDMETRAGFIE
STFKPNENTEESKIISDVEEQEAAIMDIVIKVSVADWKVMAFSKKGHLEWEYQFCTPIASAWLLKDGKV
IPISLFDDTSYTSNDDVLEDEEDIVEAARGATENSVLGMYRGQLYLQSSVRISEKFPSSPKALESVTNE
NAIPLPTIKWKPLIHSPSRTPVLVGSDEFDKLSNDKFSHEEYSNGALSILQYPYDNGYYLPYYKRERN
KRSTQITVRFLDNPHYNKNIRKKDPVLLLHWWKEIVATILFCIIATTFIVRRLFHPPHRQRKESETQCQ
TENKYDSVSGEANDSSWNDIKNSGYISRYLTD FEPIQCLGRGGFGVFEAKNKVDDCNYAIKRIRLPNRE
LAREKVMREVKALAKLEHPGIVRYFNAWLEAPPEKWQEKMDIWLKDESTDWPLSSPSPMDAPSVKIRRM
DPFSTKEHIEIAPSPQRSRSFVSGISCDQTSSSESQFSPLEFGMDHEDISESVDAAYNLQDSCLTDCD
VEDGTMDGNDEGHSELCPEASPYVRSRERTSSSIVFEDSGCDNASSKEEPKTNRLHIGNHCANKLTAF
KPTSSKSSSEATLSISPPRPTLSLDLTKNTEKLPSSPKVYLYIQMQLCRKENLKDWMNGRCTIEERE
RSVCLHIFLQIAEAVEFLHSGMLMHRDLKPSNIFFTMDDVVKVGDVGLVTAMDQDEEQVTLTPMPAYAR
HTGQVGTKLYMSPEQIHGNSYSHKVDIFSLGLILFELLYPFSTQMERVRTLDVRNLKFPPLFTQKYPCE
YVMVQDMLSPSPMERPEAINIINAVFEDLDFPGKTVLRQRSRSLSSSGTKHSRQSNNSHSPLPSN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

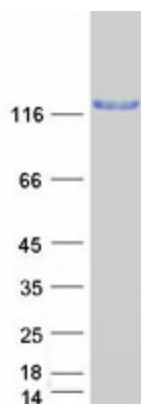
Tag:	C-Myc/DDK
Predicted MW:	122.1 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol



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Bioactivity:	Binding assay (ITC) (PMID: 28416388)
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_004827
Locus ID:	9451
UniProt ID:	Q9NZJ5 , B3KY45
RefSeq Size:	4511
Cytogenetics:	2p11.2
RefSeq ORF:	3348
Synonyms:	PEK; PERK; WRS
Summary:	The protein encoded by this gene phosphorylates the alpha subunit of eukaryotic translation-initiation factor 2, leading to its inactivation, and thus to a rapid reduction of translational initiation and repression of global protein synthesis. This protein is thought to modulate mitochondrial function. It is a type I membrane protein located in the endoplasmic reticulum (ER), where it is induced by ER stress caused by malformed proteins. Mutations in this gene are associated with Wolcott-Rallison syndrome. [provided by RefSeq, Sep 2015]
Protein Families:	Druggable Genome, Protein Kinase, Secreted Protein, Transmembrane
Protein Pathways:	Alzheimer's disease

Product images:



Coomassie blue staining of purified EIF2AK3 protein (Cat# [TP314993]). The protein was produced from HEK293T cells transfected with EIF2AK3 cDNA clone (Cat# [RC214993]) using MegaTran 2.0 (Cat# [TT210002]).