

Product datasheet for TP506645

Egln2 (NM_053208) Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse egl-9 family hypoxia-inducible factor 2 (Egln2), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA	>MR206645 protein sequence
Clone or AA Sequence:	Red=Cloning site Green=Tags(s)

MDSPCQPQALNQLPQLPGSVSESLSSRARMGVESYLPCLLPAYHRPGASGEASAGNGTPRTTATATT
 TTASPLREGFGGQDGGELWPLQSEGAAALVTKECQLAAQGARPEAPKRKWKAKDGGDAPSPSKRPWARQE
 NQEAKGESGMGCDSGASNSSSSSNTTSSSGEASARLREEVQPSAPERLALDYIVPCMRYYGICVKDNFL
 GAVLGGRVLAEVEALKWGGRLRDGQLVSQRAIPPRSIRGDQIAWVEGHEPGCRSIGALMAHVDAVIRHCA
 GRLGNYVINGRTKAMVACYPGNGLGYVRHVDNPHGDGRCITCIYYLNQNWVVKVHGGLLQIFPEGRPVA
 NIEPLFDRLIFWSDRRNPHEVKPAYATRYAITVWYFDAKERAARDKYQLASGQKGVQVPVVSQPTTPT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-MYC/DDK
Predicted MW:	45.1 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
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 after receiving vials.
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_444438
Locus ID:	112406
UniProt ID:	Q91YE2 , Q80X29



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RefSeq Size:	2124
Cytogenetics:	7 15.83 cM
RefSeq ORF:	1260
Synonyms:	0610011A13Rik; C85656; Hif-p4h-1; Ier4; Phd1; SM-20
Summary:	<p>Cellular oxygen sensor that catalyzes, under normoxic conditions, the post-translational formation of 4-hydroxyproline in hypoxia-inducible factor (HIF) alpha proteins. Hydroxylates a specific proline found in each of the oxygen-dependent degradation (ODD) domains (N-terminal, NODD, and C-terminal, CODD) of HIF1A. Also hydroxylates HIF2A. Has a preference for the CODD site for both HIF1A and HIF2A. Hydroxylated HIFs are then targeted for proteasomal degradation via the von Hippel-Lindau ubiquitination complex. Under hypoxic conditions, the hydroxylation reaction is attenuated allowing HIFs to escape degradation resulting in their translocation to the nucleus, heterodimerization with HIF1B, and increased expression of hypoxia-inducible genes. EGLN2 is involved in regulating hypoxia tolerance and apoptosis in cardiac and skeletal muscle. Also regulates susceptibility to normoxic oxidative neuronal death. Links oxygen sensing to cell cycle and primary cilia formation by hydroxylating the critical centrosome component CEP192 which promotes its ubiquitination and subsequent proteasomal degradation. Hydroxylates IKBKB, mediating NF-kappaB activation in hypoxic conditions. Target proteins are preferentially recognized via a LXXLAP motif.[UniProtKB/Swiss-Prot Function]</p>