

Product datasheet for TP526270

OriGene Technologies, Inc.

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Epha7 (NM_010141) Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Mouse Eph receptor A7 (Epha7), with C-terminal MYC/DDK tag,

expressed in HEK293T cells, 20ug

Species: Mouse Expression Host: HEK293T

Expression cDNA >MR226270 representing NM 010141

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

MVVQTRFPSWIILCYIWLLGFAHTGEAQAAKEVLLLDSKAQQTELEWISSPPSGWEEISGLDENYTPIRT
YQVCQVMEPNQNNWLRTNWISKGNAQRIFVELKFTLRDCNSLPGVLGTCKETFNLYYYETDYDTGRNIRE
NLYVKIDTIAADESFTQGDLGERKMKLNTEVREIGPLSKKGFYLAFQDVGACIALVSVKVYYKKCWSIVE
NLAVFPDTVTGSEFSSLVEVRGTCVSSAEEEAENSPRMHCSAEGEWLVPIGKCICKAGYQQKGDTCEPCG
RRFYKSSSQDLQCSRCPTHSFSDREGSSRCECEDGYYRAPSDPPVVACTRPPSAPQNLIFNINQTTVSLE
WSPPADNGGRNDVTYRILCKRCSWEQGECVPCGSNIGYMPQQTGLEDNYVTVMDLLAHANYTFEVEAVNG
VSDLSRSQRLFAAVSITTGQAAPSQVSGVMKERVLQRSVQLSWQEPEHPNGVITEYEIKYYEKDQRERTY
STLKTKSTSASINNLKPGTVYVFQIRAVTAAGYGNYSPRLDVATLEEASGKMFEATAVSSEQNPVIIIAV
VAVAGTIILVFMVFGFIIGRRHCGYSKADQEGDEELYFHFKFPGTKTYIDPETYEDPNRAVHQFAKELDA
SCIKIERVIGAGEFGEVCSGRLKLPGKRDVAVAIKTLKVGYTEKQRRDFLCEASIMGQFDHPNVVHLEGV
VTRGKPVMIVIEFMENGALDAFLRKHDGQFTVIQLVGMLRGIAAGMRYLADMGYVHRDLAARNILVNSNL
VCKVSDFGLSRVIEDDPEAVYTTTGGKIPVRWTAPEAIQYRKFTSASDVWSYGIVMWEVMSYGERPYWDM
SNQDVIKAIEEGYRLPAPMDCPAGLHQLMLDCWQKDRAERPKFEQIVGILDKMIRNPSSLKTPLGTCSRP
LSPLLDQSTPDFTAFCSVGEWLQAIKMERYKDNFTAAGYNSLESVARMTIDDVMSLGITLVGHQKKIMSS
IQTMRAQMLHLHGTGIQV

TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Tag: C-MYC/DDK
Predicted MW: 112.3 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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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 034271

Locus ID: 13841

UniProt ID: <u>Q61772</u>, <u>Q8CC52</u>

RefSeq Size: 6732

Cytogenetics: 4 12.42 cM

RefSeq ORF: 2994

Synonyms: Cek11; Ebk; Ehk3; Hek11; Mdk1

Summary: Receptor tyrosine kinase which binds promiscuously GPI-anchored ephrin-A family ligands

residing on adjacent cells, leading to contact-dependent bidirectional signaling into neighboring cells. The signaling pathway downstream of the receptor is referred to as forward signaling while the signaling pathway downstream of the ephrin ligand is referred to as reverse signaling. Among GPI-anchored ephrin-A ligands, EFNA5 is a cognate/functional ligand for EPHA7 and their interaction regulates brain development modulating cell-cell adhesion and repulsion. Has a repellent activity on axons and is for instance involved in the guidance of corticothalamic axons and in the proper topographic mapping of retinal axons to the colliculus. May also regulate brain development through a caspase(CASP3)-dependent proapoptotic activity. Forward signaling may result in activation of components of the ERK signaling pathway including MAP2K1, MAP2K2, MAPK1 AND MAPK3 which are phosphorylated upon activation of EPHA7.

Isoform 4 which lacks the kinase domain may regulate isoform 1 adhesive properties.

[UniProtKB/Swiss-Prot Function]