

EphA4 Protein, Human (HEK293)

Cat. No.:	HY-P70382
Synonyms:	rHuEphrin type-A receptor 4/EphA4; Ephrin type-A receptor 4; HEK8; SEK; TYRO1; EPHA4; Tyrosine-protein kinase receptor SEK; Tyrosine-protein kinase TYRO1; EK8; hEK8; EPH-like kinase 8
Species:	Human
Source:	HEK293
Accession:	P54764 (V20-T547)
Gene ID:	2043
Molecular Weight:	60-80 kDa

PROPERTIES

AA Sequence	<pre> VTGSRVYPAN EVTLLDSRSV QGELGWIASP LEGGWEEVSI MDEKNTPIRT YQVCNVMEPS QNNWLRTDWI TREGAQRVYI EIKFTLRDCN SLPGVMGTCK ETFNLYYYES DNDKERFIRE NQFVKIDTIA ADESFTQVDI GDRIMKLNTE IRDVGPLSKK GFYLAFAQDVG ACIALVSVRV FYKKCPLTVR NLAQFPDTIT GADTSSLVEV RGSVCVNNSEE KDVPKMYCGA DGEWLVPIGN CLCNAGHEER SGECQACKIG YYKALSTDAT CAKCPHSYS VWEGATSTCT DRGFFRADND AASMPCTRPP SAPLNLSNV NETSVNLEWS SPQNTGGRQD ISYNVVCKKC GAGDPSKCRP CGSGVHYTPQ QNGLKTTKVS ITDLLAHTNY TFEIWA VNGV SKYNPNDQS VSVTVTTNQA APSSIALVQA KEVTRYSVAL AWLEPDRPNG VILEYEVKYY EKDQNERSYR IVRTAARNTD IKGLNPLTSY VFHVRARTAA GYGDFSEPLE VTTNTVPSRI IGDGANST </pre>
Biological Activity	The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH ₂ O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background

The EphA4 protein is a receptor tyrosine kinase that interacts with membrane-bound ephrin ligands on adjacent cells, enabling bidirectional signaling. It can be activated by both GPI-anchored ephrin-A and transmembrane ephrin-B ligands, such as EFNA1 and EFNB3. Activation of EphA4 modulates cell morphology and integrin-dependent cell adhesion by regulating the activity of Rac, Rap, and Rho GTPases. In the nervous system, EphA4 plays a crucial role in axonal guidance, including corticospinal projections and segregation of motor and sensory axons during neuromuscular circuit development. It also contributes to synaptic plasticity and is involved in repair after injury, preventing axonal regeneration. EphA4's promiscuity allows it to participate in various cell-cell signaling processes, including the development of the thymic epithelium. Furthermore, it regulates pillar cell separation in the cochlear organ of Corti by forming a complex with ADAM10 and CADH1, leading to the disruption of adherens junctions. EphA4 phosphorylates CAPRIN1, promoting the formation of a membraneless compartment.

Caution: Product has not been fully validated for medical applications. For research use only.

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