

Recombinant Human EPHB1 Protein (D602-A896), His tagged

Cat. No. EPHB1-0988H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human 6His-TEV-EPHB1(602-896) Protein was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	D602-A896
Description	Receptor tyrosine kinase which binds promiscuously transmembrane ephrin-B 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. Cognate/functional ephrin ligands for this receptor include EFNB1, EFNB2 and EFNB3. During nervous system development, regulates retinal axon guidance redirecting ipsilaterally ventrotemporal retinal ganglion cells axons at the optic chiasm midline. This probably requires repulsive interaction with EFNB2. In the adult nervous system together with EFNB3, regulates chemotaxis, proliferation and polarity of the hippocampus neural progenitors. In addition to its role in axon guidance also plays an important redundant role with other ephrin-B receptors in development and maturation of dendritic spines and synapse formation. May also regulate angiogenesis. More generally, may play a role in targeted cell migration and adhesion. Upon activation by EFNB1 and probably other ephrin-B ligands activates the MAPK/ERK and the JNK signaling cascades to regulate cell migration and adhesion respectively. Involved in the maintenance of the pool of satellite cells

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	(muscle stem cells) by promoting their self-renewal and reducing their activation and differentiation.
Form	Liquid
Endotoxin	< 0.01 EU per µg of the protein
Purity	90%
Stability	Samples are stable for up to twelve months from date of receipt at -20 to -80 centigrade.
Storage	Store it under sterile conditions at -20 to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Storage Buffer	Supplied as sterile 50 mM Tris-HCl (pH7.5), 200 mM NaCl, 20% glycerol
Shipping	It is shipped out with blue ice.

GENE INFORMATION

Gene Name	EPHB1 EPH receptor B1 [Homo sapiens (human)]
Official Symbol	EPHB1
Synonyms	EPHB1; EPH receptor B1; EphB1, EPHT2; ephrin type-B receptor 1; Hek6; EK6; EPH-like kinase 6; eph tyrosine kinase 2; soluble EPHB1 variant 1; tyrosine-protein kinase receptor EPH-2; neuronally-expressed EPH-related tyrosine kinase; ELK; NET; EPHT2; FLJ37986;
Gene ID	2047

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mRNA Refseq	NM_004441
Protein Refseq	NP_004432
MIM	600600
UniProt ID	P54762

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