Ephrin-B2/EFNB2 Protein, Human (HEK293, Fc)

Cat. No.:	HY-P77645
Synonyms:	EPLG5; HTKL; LERK5; EFNB2
Species:	Human
Source:	HEK293
Accession:	P52799 (I28-A229)
Gene ID:	1948
Molecular Weight:	50-70 kDa

PROPERTIES

Biological Activity	Immobilized Human EPHB2, His Tag at 1 μg/mL (100 μl/well) on the plate. Dose response curve for Human Ephrin-B2, hFc Tag with the EC_{50} of ≤4.0 ng/mL determined by ELISA.
Appearance	Lyophilized powder
Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O.
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	Ephrin-B2, also recognized as EFNB2, emerges as a pivotal cell surface transmembrane ligand for Eph receptors, a family of receptor tyrosine kinases critical in orchestrating migration, repulsion, and adhesion during neuronal, vascular, and epithelial development. Displaying a propensity to bind promiscuously to Eph receptors on adjacent cells, Ephrin-B2 instigates contact-dependent bidirectional signaling, delineated into forward signaling downstream of the receptor and reverse signaling downstream of the ephrin ligand. Its binding affinity extends to receptor tyrosine kinases, including EPHA4, EPHA3, and EPHB4, with the latter forming a crucial partnership in heart morphogenesis and angiogenesis, governing cell adhesion and migration. In EPHB4-mediated forward signaling, Ephrin-B2 regulates cellular repulsion and segregation from EFNB2-expressing cells, potentially influencing the orientation of longitudinally projecting axons. Notably, Ephrin-B2 assumes a unique role as a receptor for Hendra virus and Nipah virus during microbial infection, adding an intriguing facet to its multifaceted functions.

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

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA