

California Bioscience

Product Datasheet

Product Name	Ephrin B1 Human Recombinant
Cata No	CB501112
Source	Escherichia Coli.
Synonyms	Ephrin-B1, EPH-related receptor tyrosine kinase ligand 2, LERK-2, ELK ligand,
	ELK-L, EFNB1, EFL-3, EPLG2, LERK2, CFND, CFNS, EFL3, MGC8782.

Description

Efnb1 is a type I membrane protein and a ligand of Eph-related receptor tyrosine kinases. Ephrins and EPH-related receptors comprise the largest subfamily of receptor protein-tyrosine kinases. Based upon their structures and sequence relationships, ephrins are divided into the ephrin-A (EFNA) class, which are attached to the membrane by a glycosylphosphatidylinositol linkage, and the ephrin-B (EFNB) class, which are transmembrane proteins. Class A ephrins are linked to the membrane by a GPI linkage and bind primarily to EphA receptors; Class B ephrins contain a membrane-spanning region and bind primarily to EphB receptors. Ephrin B1 binds to the receptor tyrosine kinases ephb1 and epha1.

Both ephrins and Eph receptors are largely expressed throughout the ectoderm, mesoderm, and endoderm of vertebrate embryos.

Ephrin B1 may play a role in cell adhesion and function in the development or maintenance of the nervous system. Efnb1 binds to and induces the collapse of commissural axons/growth cones in vitro. Ephrin B1 may play a role in constraining the orientation of longitudinally projecting axons (by

similarity).

Defects in the efnb1 gene are a cause of craniofrontonasal syndrome (cfns) aka craniofrontonasal dysplasia (cfnd). Ephrin B1 Human Recombinant (aa 136-347) expressed in E.coli, shows a 47 kDa SDS-PAGE. The Ephrin B1 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered clear solution.

Formulation

Ephrin B1 protein at 100µg/ml in 50mM Tris-Acetate, pH7.5, 1mM EDTA and 20% Glycerol.

Stability

Store vial at -20° to -80° . When stored at the recommended temperature, this protein is stable for 12 months.

Please prevent freeze-thaw cycles.

Applications

- ELISA
- Inhibition Assays
- Western Blotting