

EFNB1

Recombinant Human Ephrin-B1 His

Catalog No. CRE112A **Quantity:** 5 μg

CRE112B 20 μg CRE112C 1 mg

Alternate Names: ephrin-B1, LERK2, EPLG2, Elk-L, EPH-related receptor tyrosine kinase ligand 2, EFL-3,

ELK ligand, CFND, CFNS, Craniofrontonasal Syndrome (craniofrontonasal dysplasia)

Description: Recombinant Human Ephrin-B1 is comprised of aa 136-247 of the full length protein and

is purified by proprietary chromatographic techniques.

Ephrin-B1 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. It 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), also

known as craniofrontonasal dysplasia (CFND).

 GenelD:
 1947

 Source:
 E. coli

Molecular Weight: 47 kDa by SDS-PAGE

Formulation: Sterile filtered clear solution of 20 mM Tris-HCl buffer (pH 8.0) + 0.4 M Urea and 5%

glycerol.

Purity: Greater than 95% as determined by SDS-PAGE.

Amino Acid Sequence: MGSSHHHHHH SSGLVPRGSH MLAKNLEPVS WSSLNPKFLS GKGLVIYPKI

GDKLDIICPR AEAGRPYEYY KLYLVRPEQA AACSTVLDPN VLVTCNRPEQ EIRFTIKFQE FSPNYMGLEF KKHHDYYITS TSNGSLEGLE NREGGVCRTR TMKIIMKVGQ DPNAVTPEQL TTSRPSKEAD NTVKMATQAP GSRGSLGDSD

GKHETVNQEE KSGPGASGGS SGDPDGFFNS K

Applications: ELISA, Western blot, Inhibition Assays

Storage & Stability: Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer

periods of time. For long term storage it is recommended to add a carrier protein (0.1%

E-mail: <u>info@cellsciences.com</u>
Website: www.cellsciences.com

HSA or BSA).

Avoid multiple freeze-thaw cycles.

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