PRODUCT INFORMATION

Expression system Baculovirus

Domain 23-214aa

UniProt No. P52797

NCBI Accession No. NP_004943.1

Alternative Names

LERK3, EPLG3, Ephrin-A3, EPH-related receptor tyrosine kinase ligand 3, EHL1 ligand, EHK1-L, EFNA3, EFL2

PRODUCT SPECIFICATION

Molecular Weight 48.7 kDa (434aa)

Concentration 0.5mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity

> 90% by SDS-PAGE

Endotoxin level < 1 EU per 1ug of protein (determined by LAL method)

Tag hlgG-His-Tag

Application SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

Ephrin-A3, also known as EFNA3, is a member of the ephrin family. The ephrins and EPH-related receptors comprise the largest subfamily of receptor protein-tyrosine kinases and have been implicated in mediating developmental events, especially in the nervous system and in erythropoiesis. This protein activates EphA4 on hippocampal neurons to regulate dendritic spine morphology and long term potentiation. The same interaction



induces reverse signaling through it to regulate glutamate uptake by the astrocyte and the availability of glutamate in the synapse. Astrocyte-expressed Ephrin-3 also interacts with EphA7 to inhibit the proliferation of neural progenitor cells. Recombinant human Ephrin-A3, fused to hlgG-His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

<ADP>QGPGGAL GNRHAVYWNS SNQHLRREGY TVQVNVNDYL DIYCPHYNSS GVGPGAGPGP GGGAEQYVLY MVSRNGYRTC NASQGFKRWE CNRPHAPHSP IKFSEKFQRY SAFSLGYEFH AGHEYYYIST PTHNLHWKCL RMKVFVCCAS TSHSGEKPVP TLPQFTMGPN VKINVLEDFE GENPQVPKLE KSISG<LEPKS CDKTHTCPPC PAPELLGGPS VFLFPPKPKD TLMISRTPEV TCVVVDVSHE DPEVKFNWYV DGVEVHNAKT KPREEQYNST YRVVSVLTVL HQDWLNGKEY KCKVSNKALP APIEKTISKA KGQPREPQVY TLPPSRDELT KNQVSLTCLV KGFYPSDIAV EWESNGQPEN NYKTTPPVLD SDGSFFLYSK LTVDKSRWQQ GNVFSCSVMH EALHNHYTQK SLSLSPGKHH HHHH>

General References

Gomez-Maldonado L., et al. (2015 Oncogene. 34:2609-2620. Shukla A., et al. (2018) J Cell Biochem. 119:7934-7943.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

