Human Ephrin-A1 / EFNA1 Protein (His Tag)

Catalog Number: **10882-H08H**

General Information

Gene Name Synonym:

B61; ECKLG; EFL1; EFNA1; EPLG1; LERK-1; LERK1; TNFAIP4

Protein Construction:

A DNA sequence encoding the human Ephrin-A1 (NP_004419.2) without the propeptide (Met 1-Ser182) was expressed, fused with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 97 % as determined by SDS-PAGE

Bio Activity:

Measured by its binding ability in a functional ELISA. Immobilized Human Ephrin-A1 His (Cat:10882-H08H) at 2 μg/ml (100 μl/well) can bind Human EphA1 hFc(Cat:15789-H02H), the EC_{50}?of Human EphA1 hFc is 8.0-48.0 ng/mL.

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Predicted N terminal: Asp 19

Molecular Mass:

The recombinant human Ephrin-A1 comprises 175 amino acids a predicted molecular mass of 20.8 kDa. As a result of glycosylation, rh Ephrin-A1 migrates as an approximately 26 kDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Stability & Storage:
Samples are stable for twelve months from date of receipt at -20℃ to -80℃.

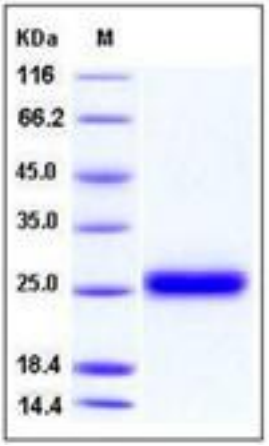
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

EPH-related receptor tyrosine kinase ligand 1 (abbreviated as Ephrin-A1) also known as ligand of eph-related kinase 1 or EFNA1, is a member of the ephrin (EPH) family. The Eph family receptor interacting proteins (ephrins) are a family of proteins that serve as the ligands of the Eph receptor, which compose the largest known subfamily of receptor protein-tyrosine kinases (RTKs). Ephrin-A1/EFNA1 and its Eph family of receptor tyrosine kinases are expressed by cells of the SVZ. Ephrin subclasses are further distinguished by their mode of attachment to the plasma membrane: ephrin-A ligands bind EphA receptors and are anchored to the plasma membrane via a glycosylphosphatidylinositol (GPI) linkage, whereas ephrin-B ligands bind EphB receptors and are anchored via a transmembrane domain. An exception is the EphA4 receptor, which binds both subclasses of ephrins. Ephrin-A1 and one of its receptor EphA2 were expressed in xenograft endothelial cells and also tumor cells and play a role in human cancers, at least in part by influencing tumor neovascularization.

References

1.Deroanne C, *et al.* (2003) EphrinA1 inactivates integrin-mediated vascular smooth muscle cell spreading via the Rac/PAK pathway. J Cell Sci. 116(7): 1367-76. 2.Ojima T, *et al.* (2006) EphrinA1 inhibits vascular endothelial growth factor-induced intracellular signaling and suppresses retinal neovascularization and blood-retinal barrier breakdown. Am J Pathol. 168(1): 331-9. 3.Wu D, *et al.* (2004) Prognostic value of EphA2 and EphrinA-1 in squamous cell cervical carcinoma. Gynecol Oncol. 94(2): 312-9.