General Information

Gene Name Synonym:
EPLG5; Htk-L; HTKL; LERK5

Protein Construction:
A DNA sequence encoding the human EFNB2 (NP_004084.1) extracellular domain (Met 1-Ala 229) was expressed, fused with a C-terminal polyhistidine tag.

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 EFNB2 at 2 µg/ml (100 µl/well) can bind human EphB4 with a linear range of 1.56-12.5 ng/ml.

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

Stability:
Samples are stable for up to twelve months from date of receipt at -70 °C.

Predicted N terminal: Ile 28

Molecular Mass:
The recombinant human EFNB2 consists of 213 amino acids after removal of the signal peptide and predicts a molecular mass of 23.6 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rh EFNB2 is approximately 35-40 kDa due to glycosylation.

Formulation:
Lyophilized from sterile PBS, pH 7.4

Usage Guide

Storage:
Store it under sterile conditions at -20°C to -80°C 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.

Protein Description

EphrinB2 also known as EFNB2 is a member of the ephrin family. EphrinB2 is involved in establishing arterial versus venous identity and perhaps in anastamosing arterial and venous vessels at their junctions. The transmembrane-associated ephrin ligands and their Eph family of receptor tyrosine kinases are expressed by cells of the SVZ. Eph/ephrin interactions are implicated in axon guidance, neural crest cell migration, establishment of segmental boundaries, and formation of angiogenic capillary plexi. Eph receptors and ephrins are divided into two subclasses, A and B, based on binding specificities. 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. EphrinB2 expression progressively extends from the arterial endothelium to surrounding smooth muscle cells and to pericytes, suggesting that ephrin-B2 may play an important role during formation of the arterial muscle wall.

References