

Ephrin B2 Active Protein | EFNB2 active protein

Ephrin B2 Protein, Canine, Recombinant (His Tag)

CATALOG #
AAA258256

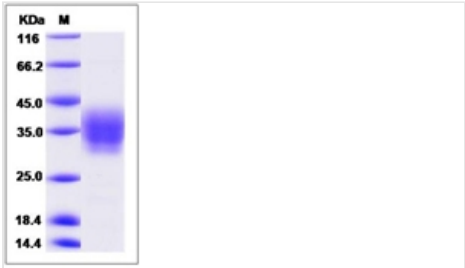
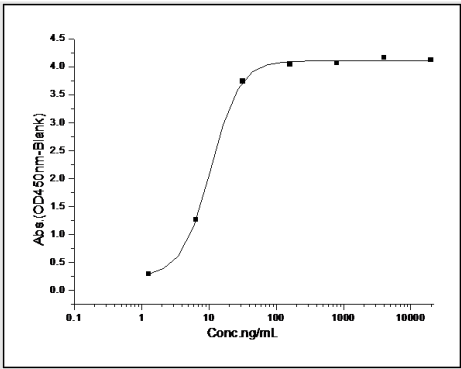
HOST
HEK293 Cells

PRODUCT SYNONYMS

Ephrin B2; Ephrin B2 Protein; Canine; Recombinant (His Tag); Canine Ephrin-B2/EFNB2 Protein (His Tag); ephrin-B2; EFNB2 active protein

PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	>95% as determined by SDS-PAGE
Form/Format	Lyophilized from sterile PBS, pH7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hard copy of CoA.
Sequence	Met1-Ala22 9
Species	Canine
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	Ile 28
Tag	C-His
Protein Construction	A DNA sequence encoding the canine EFNB2 (NP_001107768.1)(Met1-Ala229) was expressed with a C-terminal polyhistidine tag.
Reconstitution	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.
Activity	Measured by its binding ability in a functional ELISA. Immobilized canine EFNB2-His at 10ug/ml (100ul/well) can bind human EphB4-Fc. The EC50 of human EphB4-Fc is 9-20ng/mL.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice.



SDS-PAGE

Application Data
Measured by its binding ability in a functional ELISA. Immobilized canine EFNB2-His at 10 ug/ml (100 ul /well) can bind human EphB4-Fc. The EC50 of human EphB4-Fc is 9-20 ng/ml.

ADDITIONAL INFORMATION

Related Product Information for EFNB2 active protein

Background: EphrinB2 also known as EFNB2 is a member of the ephrin family. EphrinB2 is involved in establishing arterial versus venous identity and perhaps in anastomosing 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

Wang HU, et al. (1998) Molecular distinction and angiogenic interaction between embryonic arteries and veins revealed by ephrin-B2 and its receptor Eph-B4. Cell. 93(5): 741-53. Gale NW, et al. (2001) Ephrin-B2 selectively marks arterial vessels and neovascularization sites in the adult, with expression in both endothelial and smooth-muscle cells. Dev Biol. 230(2): 151-60. Shin D, et al. (2001) Expression of ephrinB2 identifies a stable genetic difference between arterial and venous vascular smooth muscle as well as endothelial cells, and marks subsets of microvessels at sites of adult neovascularization. Dev Biol. 230(2): 139-50.

NCBI AND UNIPROT INFORMATION

Molecular Weight

The recombinant canine EFNB2 comprises 213 amino acids and has a predicted molecular mass of 23.6kDa. The apparent molecular mass of the protein is approximately 33-38kDa in SDS-PAGE under reducing conditions due to glycosylation.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.