

Canine Ephrin-A5 / EFNA5 Protein (Fc Tag)

Catalog Number: 70072-D02H



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

EFNA5

Protein Construction:

A DNA sequence encoding the canine EFNA5 (XP_850582.2) (Met1-Asn203) was expressed with the Fc region of human IgG1 at the C-terminus.

Source: Canine

Expression Host: HEK293 Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Bio Activity:

Immobilized human EPHA3-His (Cat:11459-H08H) at 10 µg/ml (100 µl/well) can bind canine EFNA5-Fc, The EC₅₀ of canine EFNA5-Fc is 11.5-26.7 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: Gln 21

Molecular Mass:

The recombinant canine EFNA5/Fc is a disulfide-linked homodimer. The reduced monomer comprises 424 amino acids and has a predicted molecular mass of 48.2 kDa. The apparent molecular mass of the protein is approximately 55-60 kDa 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

Storage:

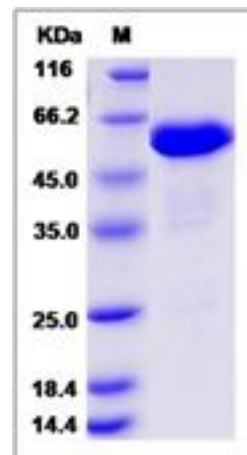
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Ephrin-A5 also known as EFNA5, is a member of the Ephrin 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 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. Ephrin-A5/EFNA5 may function actively to stimulate axon fasciculation. The interaction of EFNA5 with EPHA5 also mediates communication between pancreatic islet cells to regulate glucose-stimulated insulin secretion. Ephrin-A5/EFNA5 also serves as a cognate/functional ligand for EPHA7, their interaction regulates brain development modulating cell-cell adhesion and repulsion.

References

1. Frisén J, *et al.* (1998) Ephrin-A5 (AL-1/RAGS) is essential for proper retinal axon guidance and topographic mapping in the mammalian visual system. *Neuron*. 20(2): 235-43.
2. Feldheim DA, *et al.* (2000) Genetic analysis of ephrin-A2 and ephrin-A5 shows their requirement in multiple aspects of retinocollicular mapping. *Neuron*. 25(3): 563-74.
3. Wahl S, *et al.* (2000) Ephrin-A5 induces collapse of growth cones by activating Rho and Rho kinase. *J Cell Biol.* 149(2): 263-70.

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