Rat EphA3 Protein (His Tag)

Catalog Number: **80465-R08H**

General Information

Gene Name Synonym:

EphA3

Protein Construction:

A DNA sequence encoding the rat EPHA3 (EDL75897.1) (Met1-His541) was expressed with a polyhistidine tag at the C-terminus.

Source: Rat

Expression Host: HEK293 Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Bio Activity:

Measured by its binding ability in a functional ELISA. Immobilized rat EPHA3-His at 10 μg/ml (100 μl /well) can bind rat EFNA5-Fc(Cat:80105-R02H), The EC_{50} of ratEFNA5-Fc (Cat:80105-R02H) is 9-20ng/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 ℃

Predicted N terminal: Glu 21

Molecular Mass:

The recombinant rat EPHA3 comprises 532 amino acids and predicts a molecular mass of 61.2 kDa. The apparent molecular mass of the recombinant protein is approximately 70.5 kDa in SDS-PAGE under reducing conditions due to glycosylation.

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:

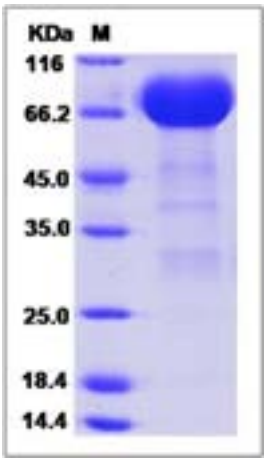
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

EPHA3 gene belongs to the ephrin receptor subfamily of the protein-tyrosine kinase family. EPH and EPH-related receptors have been implicated in mediating developmental events, particularly in the nervous system. The ephrin receptors are divided into 2 groups based on the similarity of their extracellular domain sequences and their affinities for binding ephrin-A and ephrin-B ligands. EPHA3 gene encodes a protein that binds ephrin-A ligands. EPHA3 is involved in the retinotectal mapping of neurons. It may also control the segregation but not the guidance of motor and sensory axons during neuromuscular circuit development.

References

1.Holder N, *et al*. (1999) Eph receptors and ephrins: effectors of morphogenesis. Development. 126(10):2033-44. 2. Wilkinson DG. (2000) Eph receptors and ephrins: regulators of guidance and assembly. Int Rev Cytol. 196:177-244. 3. Xu Q, *et al*. (2001) Roles of Eph receptors and ephrins in segmental patterning. Philos Trans R Soc Lond B Biol Sci. 355(1399):993-1002.