Data Sheet (Cat.No.TMPY-02493)

TargetMol

EphA3 Protein, Mouse, Recombinant (His)

General Information

Synonyms:	Tyro4;Hek4;EPH receptor A3;Mek4;AW492086;ETK1;Hek;End3;Cek4
Protein Construction:	A DNA sequence encoding the mouse EPHA3 (NP_034270.1) (Met1-His541) was expressed with a C-terminal polyhistidine tag. Predicted N terminal: Glu 21
Species:	Mouse
Expression Host:	HEK293 Cells
Accession:	Q8BRB1
Molecular Weight:	60.2 kDa (predicted)

QC Testing

Biological Activity:	1. Measured by its binding ability in a functional ELISA. 2. Immobilized mouse EPHA3-His at 10 μg/mL (100 μL/well) can bind mouse EFNA5-Fc . The EC50 of mouse EFNA5-Fc is 4.9-11.4ng/mL.
Purity:	> 95 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

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.Cancer ImmunotherapyImmune CheckpointImmunotherapyTargeted Therapy

Reference

Holder N, et al. (1999) Eph receptors and ephrins: effectors of morphogenesis. Development. 126(10):2033-44.
Wilkinson DG. (2000) Eph receptors and ephrins: regulators of guidance and assembly. Int Rev Cytol. 196:177-244.
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.