Data Sheet (Cat.No.TMPY-04918)

TargetMol

CNPY4 Protein, Mouse, Recombinant (His)

General Information

Synonyms:	2610019P18Rik;canopy FGF signaling regulator 4
Protein Construction:	A DNA sequence encoding the mouse CNPY4 (NP_848727.1) (Met1-Leu245) was expressed with a polyhistidine tag at the C-terminus. Predicted N terminal: Glu 28
Species:	Mouse
Expression Host:	HEK293 Cells
Accession:	Q8BQ47
Molecular Weight:	26.5 kDa (predicted)

QC Testing

Biological Activity:	Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 90 % 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

CNPY4 belongs to the canopy family. CNPY4 interacts with toll-like receptor 4 (TLR4) and plays a role in the regulation of the cell surface expression of TLR4. Toll-like receptors (TLRs) recognize microbial products and induce immune responses. Lipopolysaccharide is recognized by the receptor complex consisting of TLR4 and MD-2. As CNPY4, PRAT4B also regulates cell surface expression of TLR4. PRAT4B has a signal peptide followed by a mature peptide. It is associated with the hypoglycosylated, immature form of TLR4 but not with MD-2 or TLR2.

Reference

Stelzl U,et al. (2005) A human protein-protein interaction network: a resource for annotating the proteome. Cell. 122(6):957-68.

Hocking JC,et al. (2010) Distinct roles for Robo2 in the regulation of axon and dendrite growth by retinal ganglion cells. Mech Dev. 127(1-2):36-48.

Hart BE,et al. (2012) Cell surface trafficking of TLR1 is differentially regulated by the chaperones PRAT4A and PRAT4B. J Biol Chem. 287(20):16550-62.

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