Data Sheet (Cat.No.TMPY-03185)

TargetMol

METRN Protein, Mouse, Recombinant (hFc)

General Information

Synonyms:	meteorin, glial cell differentiation regulator;Hyrac;1810034B16Rik
Protein Construction:	A DNA sequence encoding the mouse METRN (Q8C1Q4-1) (Gly22-Asp291) was expressed with the fused Fc region of human IgG1 at the N-terminus. Predicted N terminal: Glu
Species:	Mouse
Expression Host:	HEK293 Cells
Accession:	Q8C1Q4-1
Molecular Weight:	58.4 kDa (predicted); 57 kDa (reducing condition, due to glycosylation)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 85 % 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

METRN (Meteorin, Glial Cell Differentiation Regulator) is a Protein Coding gene. The encoded protein belongs to the meteorin family. It is broadly expressed in the brain, kidney, and other tissues. Meteorin is a novel secreted protein that is expressed in undifferentiated neural progenitors and the astrocyte lineage, including radial glia. It plays important role in the differentiation of glial cells and also in axonal network formation during neurogenesis. Meteorin selectively promoted astrocyte formation from mouse cerebrocortical neurospheres in differentiation

culture, whereas it induced cerebellar astrocytes to become radial glia. Meteorin also induced axonal extension in small and intermediate neurons of sensory ganglia by activating nearby satellite glia.

Reference

Martin J,et al. (2004) The sequence and analysis of duplication-rich human chromosome 16. Nature. 432(7020): 988-94.

Nishino J,et al. (2004) Meteorin: a secreted protein that regulates glial cell differentiation and promotes axonal extension. EMBO J. 23(9):1998-2008.

Ota T,et al. (2004) Complete sequencing and characterization of 21,243 full-length human cDNAs. Nat Genet. 36 (1):40-5.