Data Sheet (Cat.No.TMPY-03372)

TargetMol

Cadherin 8/CDH8 Protein, Rat, Recombinant (His)

General Information

Synonyms:	cadherin 8, type 2
Protein Construction:	A DNA sequence encoding the rat CDH8 (NP_445845.2) (Met1-Met621) was expressed with a polyhistidine tag at the C-terminus. Predicted N terminal: Ala 30
Species:	Rat
Expression Host:	HEK293 Cells
Accession:	A6JXY4
Molecular Weight:	66.5 kDa (predicted); 75-85 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

Cadherins are integral membrane proteins that mediate calcium-dependent cell-cell adhesion. Type I cadherin proteins are composed of a large N-terminal extracellular domain, a single membrane-spanning domain, and a small, highly conserved C-terminal cytoplasmic domain. The extracellular domain consists of five subdomains, each containing a cadherin motif, and appears to determine the specificity of the protein's homophilic cell adhesion activity. Type II (atypical) cadherins are defined based on their lack of a HAV cell adhesion recognition

sequence specific to type I cadherins. Cadherin 8, also known as CDH 8, is a type II classical cadherin belonging to the cadherin superfamily. As mainly expressed in brain, CDH8 is found in certain nerve cell lines, such as retinoblasts, glioma cells and neuroblasts, and is putatively involved in synaptic adhesion, axon outgrowth and guidance. Human Cadherin 8 is a 799 amino acid single-pass type Itransmembrane protein with a putative 29 aa signal sequence, and a 32 aa propeptide, a 56 aa mature extracellular domain, a 21 aa transmembrane domain and a 157 aa cytoplasmic domain. The human, mouse and rat proteins share approximately 98% homology.

Reference

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