Data Sheet (Cat.No.TMPY-01843)

TargetMol

SEMA6A Protein, Human, Recombinant (His)

General Information

Synonyms:	HT018;VIA;sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6A;SEMA;SEMAQ;SEMA6A1
Protein Construction:	A DNA sequence encoding the human SEMA6A (NP_065847.1) extracellular domain (Met 1-Thr 649) was expressed, with a polyhistidine tag at the C-terminus. Predicted N terminal: Gly 19
Species:	Human
Expression Host:	HEK293 Cells
Accession:	Q9H2E6-1
Molecular Weight:	72.2 kDa (predicted); 85-95 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:	> 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

SEMA6A, the first identified class 6 semaphorin, is contributed to regulate vascular development and adult angiogenesis. SEMA6A could inhibit proliferation, migration, and invasion in different glioma cell lines. That SEMA6A may be a potential prognostic biomarker in the treatment of GBM. Among different semaphorins tested by

reverse transcriptase-polymerase chain reaction in human immune cells, the expression of class 6 transmembrane semaphorin SEMA6A was restricted to dendritic cells (DCs).

Reference

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Schmutz J., et al., 2004, Nature 431:268-74.
Neufeld, G. et al., 2005, Front Biosci. 10 : 751-60.
Fiore,R. et al., 2005, Mol Cell Biol. 25 (6):2310-9.