

Mouse ASGPR1 / ASGR1 Protein (His Tag)

Catalog Number: 50083-M07H



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

RP23-172M21.2, ASGPR1, Asgr, Asgr-1

Protein Construction:

A DNA sequence encoding the extracellular domain (Ser 60-Asn 284) of mouse ASGPR1 (NP_033844.1) was expressed with a N-terminal polyhistidine tag.

Source: Mouse

Expression Host: Human Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: His

Molecular Mass:

The secreted recombinant mouse ASGR1 consists of 241 amino acids and has a calculated molecular mass of 28 kDa. As a result of glycosylation, the recombinant protein migrates as an approximately 40-45 kDa protein in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

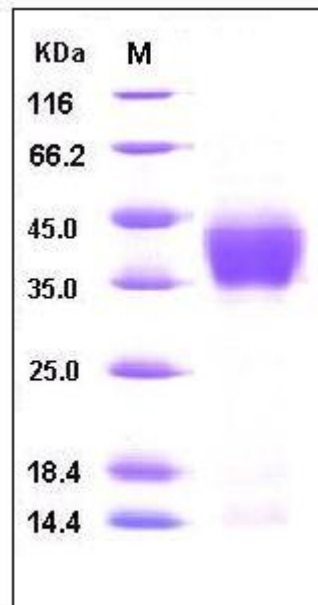
Usage Guide

Storage:

Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

SDS-PAGE:



Reconstitution:

Detailed reconstitution

products.

Protein Description

Asialoglycoprotein receptor (ASGPR) is a type II transmembrane protein that is abundantly expressed in the sinusoidal surface of the hepatic plasma membrane. It is an endocytic receptor that rapidly binds and internalizes galactose-terminated glycoproteins (asialoglycoproteins or ASGP) from the circulation. The mouse ASGPR belongs to the long-form subfamily of the C-type/Ca²⁺ dependent lectin family. It is a complex of two noncovalently-linked and highly homologous subunits, a major 42 kDa glycoprotein ASGPR1 (MHL-1) and a minor 51 kDa glycoprotein ASGR2 (MHL-2). ASGPR1 is synthesized as a type II transmembrane protein that contains a cytosolic N-terminal domain, a single transmembrane segment, and an extracellular domain which contains two important structural regions. The first is a stalk domain that contributes to noncovalent oligomerization, and the second is a Ca²⁺-dependent carbohydrate binding domain at the very C-terminus that is unusually stabilized by three ions. The aa sequence of mouse ASGPR1 ECD is 89% and 79% identical to the ASGPR1 ECD of rat and human, respectively.

References

1. Sanford, J. P. et al., 1988, DNA 7:721-728.
2. Takezawa, R. et al., 1993, Biochim. Biophys. Acta 1172:220-222.
3. Monroe, R. S. et al., 1994, Gene 148: 237-244.
4. Stockert, R. J., 1995, Physiol. Rev. 75 (3): 591-609.
5. Braun, J. R. et al., 1996, J Biol Chem. 271 (35): 21160-21166.
6. Meier, M. et al., 2000, J. Mol. Biol. 300: 857-865.
7. Weigel, P. H. et al., 2002, Biochim. Biophys. Acta 1572: 341-363.

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

Fax :+86-10-51029969 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>