



Goat Anti-Mouse ASGPR1 Polyclonal Antibody [Functional Grade] (CABT-Z500G)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse ASGPR1 (Ser60-Asn284).
Isotype	IgG
Source/Host	Goat
Species Reactivity	Mouse
Purification	Affinity Purified
Conjugate	Functional Grade
Applications	WB, ELISA, BL Recommended concentration: WB: 0.25 µg/mL
Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Format	Lyophilized
Size	100 µg
Buffer	PBS with Trehalose. Endotoxin Level<0.10 EU per 1 µg of the antibody by the LAL method.
Preservative	None
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.
Ship	Wet ice

BACKGROUND

Introduction	<p>The mouse asialoglycoprotein receptor (ASGP-R) is an endocytic recycling receptor that belongs to the long-form subfamily of the C-type/Ca⁺⁺-dependent lectin family. It is a complex of two noncovalently-linked subunits, a major 42 kDa glycoprotein (ASGPR1) and a minor 51 kDa glycoprotein (ASGR2). The major mouse ASGP-R subunit, ASGPR1, is synthesized as a 284 amino acid (aa) type II transmembrane (TM) protein that contains a 39 aa cytoplasmic region, a 21 aa TM segment, and a 224 aa extracellular domain (ECD). The ECD contains two important structural regions. The first is a stalk region of 56 aa (aa's # 59-117) that contributes to noncovalent oligomerization. The second is a 118 aa, carbohydrate-binding, Ca⁺⁺-dependent C-type lectin domain (aa's 160-277) that is unusually stabilized by three Ca⁺⁺ ions. There are two potential alternate splice forms for ASGPR1. Both are TM and show a deletion of the C-type lectin domain. One is 113 aa in length and shows a deletion of aa's # 114-284. The second is 132 aa in length and shows a deletion of aa's 118-146 and aa's 162 - 284. Mouse ASGPR1 ECD is 89% and 79% aa identical to the ASGPR1 ECD in rat and human, respectively. The minor mouse ASGP-R subunit, ASGR2, is also a C-type lectin that shares the same structural organization as ASGR-1. It is 301 aa in length and has two 45 kDa and 51 kDa differentially-glycosylated isoforms. The ECD of ASGR2 is 50% aa identical to the ECD of ASGPR1. Although ASGPR1 and 2 can be expressed individually, a fully functional and stable ASGP-R requires simultaneous expression of both subunits. The stoichiometry of a functional ASGP-R is suggested to be either a 2:2, 3:1 or 3:2 ratio of ASGPR1:ASGR2. ASGPR1 is reported to bind Gal (non-reducing), GalNAc, and sialic acid alpha 2,6GalNAc. This is generally in the context of triantennary or tetraantennary configurations.</p>
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Keywords	ASGR1;asialoglycoprotein receptor 1;HL-1;ASGPR;ASGPR1;CLEC4H1
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GENE INFORMATION

Gene Name	Asgr1
Entrez Gene ID	11889
UniProt ID	P34927