

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse ASGPR1 in direct ELISAs.
Source	Monoclonal Rat IgG _{2A} Clone # 352802.113
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse ASGPR1 Ser60-Asn284 Accession # NP_033844
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

ELISA Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

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 (1-3). It is a complex of two non-covalently 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) (4-6). The ECD contains two important structural regions. The first is a stalk region of 56 aa (aa's 59-117) that contributes to non-covalent 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 (3, 5). 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 (7). The second is 132 aa in length and shows a deletion of aa's 118-146 and aa's 162-284 (8). 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 (4, 6, 9). 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 (10-12). The stoichiometry of a functional ASGP-R is suggested to be either a 2:2, 3:1 or 3:2 ratio of ASGPR1:ASGR2 (13, 14). ASGPR1 is reported to bind Gal (nonreducing), GalNAc, and sialic acidα2,6GalNAc (3, 15, 16). This is generally in the context of triantennary or tetraantennary configurations (2).

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.