

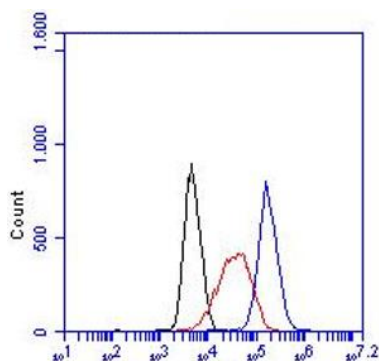
CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	ASGPR, Rat, clone 8D7	Expiry date	-
Catalog number	HM3020-20UG	Amount	20 µg
Lot number	-	Concentration	100 µg/ml
Volume	200 µl	Conjugate	None
Formulation	0.2 µm filtered in PBS+0.1%BSA+0.02%NaN3	Purification	Protein G
Host Species	Mouse IgG1		
Endotoxin	N.A.		
Storage	4°C		

Application notes

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #	1-3,5		7	4		3,5		2,4,6
Yes	•		•	•		•		•
No								
N.D.		•			•		•	

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot



FC: detection of ASGPR in HepG2 cells. Red, black and blue line represent the isotype control, cells only and HM3020F with a concentration of 10 µg/ml, respectively.

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

- W: A non-reduced sample treatment and SDS-Page was used. The band size is 42 kDa (ref.4).
- F: acetone fixed tissue section were incubated Hybridoma culture supernatant.
- IA: microtiter plates were coated with 100µl 20ug/ml for ELISA.
- Positive control: Rat hepatocytes; Negative control: Rat kidney, pancreas, small intestine, colon.

General Information
Description

The asialoglycoprotein (ASGP) receptor is a transmembrane hepatocellular surface carbohydrate binding glycoproteins lacking terminal sialic acid residues (asialoglycoproteins). Characterization of the ASGP receptor revealed its functional role in the binding, internalization and transport of a wide range of glycoproteins, which have exposed galactose or N-acetylgalactosamine residues, via the process of receptor-mediated endocytosis (RME). The ASGP receptor can bind a variety of important plasma proteins including transport proteins (i.e. transferrin), enzymes such as alkaline phosphatase, immunoglobulins including IgA, apoptotic hepatocytes, fibronectin and platelets. Additionally, the expression of the ASGP receptor has been clinically correlated to the level of hepatic function that is lost during liver diseases related to cancer, viral hepatitis, and cirrhosis. The ASGP receptor consists of major and minor subunits, which in the rat were identified as rat hepatic lectin (RHL) 1 and RHL 2/3, with molecular weights of respectively 42, 49 and 54 kDa. The selective binding (calcium and pH dependent) and uptake of terminal galactosyl bearing proteins requires the formation of hetero-oligomers between these major and minor forms. The total ASGP receptor population consisted of two functionally distinct receptor populations, designated State 1 and State 2, which

were involved in the endocytosis and intracellular processing of ligands by different pathways. The monoclonal antibody 8D7 recognizes a subunit-specific epitope on RHL-1 of rat ASGPR. The monoclonal antibody 8D7 is cross reactive with human ASGPR.

Immunogen	Crude rat liver membrane extracts
Aliases	Asialoglycoprotein receptor 1, ASGPR 1, ASGP-R 1, Hepatic lectin 1, MHL-1
Gene	Gene name: Asgr1
Cross reactivity	Human: Yes
References	<ol style="list-style-type: none">1. Mizuno, M et al: Development of a monoclonal antibody identifying an antigen which is segregated to the sinusoidal and lateral plasma membranes of rat hepatocytes. <i>Gastroenterol Japan</i> 1986, <i>21</i>: 2382. Mizuno, M et al; Monoclonal antibodies identifying antigens on distinct domains of rat hepatocytes. <i>Liver</i> 1987, <i>7</i>: 2513. Hyodo, I et al; Distribution of asialoglycoprotein receptor in human hepatocellular carcinoma. <i>Liver</i> 1993, <i>13</i>: 804. Shimada, M et al; A monoclonal antibody to rat asialoglycoprotein receptor that recognizes an epitope specific to its major subunit. <i>Hepato Res</i> 2003, <i>26</i>: 555. Hirai, M et al. Development of syngeneic monoclonal anti-idiotypic antibodies to mouse monoclonal anti-asialoglycoprotein receptor antibody. <i>Acta med okayama</i> 2002 <i>56</i>: 1356. Keyel, P et al. A single common portal for clathrin-mediated endocytosis of distinct cargo governed by cargo-selective adaptors. <i>Mol boil Cell</i> 2006 <i>17</i>:43007. Zhou, X et al. Effects of hepatitis B virus S protein on human sperm function. <i>Hum Reprod</i> 2009 <i>1</i>: 1
Storage&stability	Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.
Precautions	For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

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Approved by Manager of QC
Brenda Teunissen

Date
11/01/2021

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