

Datasheet for 200-101-456**Fetuin Antibody****Overview**

Description:	Anti-Fetuin (2-HS Glycoprotein) (GOAT) Antibody - 200-101-456
Item No.:	200-101-456
Size:	500 µg
Applications:	WB
Reactivity:	Human
Host Species:	Goat

Product Details

Background:	Human fetuin (2-Heremans-Schmid-glycoprotein or α_2 -HS-glycoprotein) is a major plasma glycoprotein predominantly synthesized in the liver. Human fetuin is named after its bovine homolog. Fetuins are found in most mammals. Human fetuin is a negative acute-phase protein; normal circulating levels in adults (300–600 µg/ml) fall significantly (30–50%) during injury and infection. The biological role of fetuin is unknown, although it has been implicated as an immunomodulator that can participate in stimulation of bacterial phagocytosis by neutrophils and promotion of endocytosis by mouse macrophages. Hepatocytes are the principal cell source of circulating fetuin, but it also is expressed by monocyte/macrophages. Fetuins occur in large amounts in blood and cerebrospinal fluid and accumulate to high concentrations in calcified bone. The fetuin promoter region has several potential interleukin 6-responsive elements, and its synthesis is down-regulated during injury and inflammation. Fetuin is an acidic glycoprotein with three N-linked and three O-linked oligosaccharide chains, whose terminal sugar residues are rich in sialic acid (N-acetylneuraminic acid), contributing to its net negative charge. A role for fetuin as a carrier of bioactive molecules has been proposed based on observations that it binds and carries Ca^{2+} ion. Fetuin is implicated in bone remodeling, immune function and may play a role in tumor progression of certain cell types.
Synonyms:	goat anti-Fetuin antibody, 59 kDa bone sialic acid-containing protein antibody, A2HS antibody, Aa2-066 antibody, AHS antibody, Ahsg alpha-2-HS-glycoprotein antibody, AHSG antibody, Alpha 2 Z globulin antibody, Alpha-2-HS-glycoprotein antibody, Ba-alpha-2-glycoprotein, Fetuin-A, PRO2743
Host Species:	Goat
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	AHSG
Reactivity:	Human
Immunogen Type:	Conjugated Peptide
Immunogen:	This purified antibody was prepared from rabbit serum after repeated immunizations with a recombinant human fetuin (a ₂ -HS glycoprotein) processed to remove a 40 amino acid residue bridging peptide resulting in the mature form of the protein.
Purity/Specificity:	This product is an IgG fraction antibody purified from monospecific antiserum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Goat Serum.
Relevant Links:	• NCBI - NP_001613.2 • UniProtKB - P02765 • GeneID - 197

Application Details

Tested Applications:	WB
Application Note:	This purified polyclonal antibody has been tested by western blot. Although not tested, this antibody is likely functional in ELISA, immunohistochemistry, and immunoprecipitation. A doublet band or slightly lower molecular weight band (see image) may be visible by western blot due to proteolytic processing, variable glycosylation and/or phosphorylation. Proteolytic processing may include the removal of a 40 amino acid residue bridging peptide from the A and B chains of fetuin in vivo.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:40,000 - 1:200,000
WB:	1:10,000 - 1:20,000

Formulation

Physical State:	Lyophilized
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None
Reconstitution Volume:	500 μ L
Reconstitution Buffer:	Restore with deionized water (or equivalent)

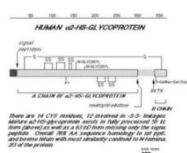
Shipping & Handling

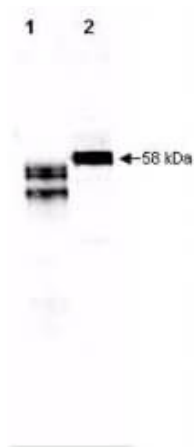
Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images

Diagram

Data contributed by Dr. George Grunberger, Wayne State University.





Western Blot

Western blot of Fetuin. Anti-Human Fetuin antibody, generated by immunization with mature protein, was tested by western blot against fetuin in purified preparations and in human plasma. Lane 1 contains 250 ng of purified human fetuin. Lane 2 contains 5 μ l of a 1:50 dilution of human serum. Dilution of Anti-Human Fetuin antibody between 1:10,000 and 1:20,000 showed strong reactivity by western blot. In this blot the antibody was used at a 1:10,000 dilution incubated 1 h at room temperature in 1% BSA in TTBS. Detection occurred using a 1:5,000 dilution of IRDye™800 conjugated Donkey anti-Goat IgG (code # 605-732-125) for 45 min at room temperature. LICOR's Odyssey® Infrared Imaging System was used to scan and process the image. Other detection systems will yield similar results.

Disclaimer

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