Fetuin-A (AHSG) NATIVE, Human Plasma

Product Data Sheet

Type: Native
Source: Human plasma
Species: Human
Other names: Alpha-2-HS-glycoprotein, Ba-alpha-2-glycoprotein, Alpha-2-Z-globulin, Fetuin A, AHSG, FETUA, PRO2743

Cat. No.:
RD172037100 (0.1 mg)

Description

Native protein isolated from human pooled plasma, 349 AA, MW: 37.3 kDa (calculated without glycosylation). Protein identity confirmed by LC-MS/MS.

Introduction to the Molecule

Fetuin-A (AHSG), a 59 kDa glycoprotein, consisting of two cystatin-like domains and a smaller unrelated domain, is predominantly synthesized in liver. It is secreted into the blood stream and deposited as a noncollagenous protein in mineralized bones and teeth. Fetuin-A occurs in high serum concentrations during foetal life, whereas its level declines following infection, inflamatory and malignancy. Fetuin-A acts as an important circulating inhibitor of ectopic calcification, frequent complication of many degenerative diseases. Low serum level of Fetuin-A is associated with vascular and valvular calcification, atherosclerosis, malnutrition and higher cardiovascular mortality in chronic renal failure, liver cancer and liver cirrhosis patients on long-term dialysis. AHSG protein represents a natural inhibitor of tyrosinase kinase activity of the insulin receptor. It may play a significant role in regulating postprandial glucose disposal, insulin sensitivity, weight gain, and fat accumulation. The serum and bone-resident Fetuin-A binds to transforming growth factor-beta and blocks TGF-beta binding to cell surface receptors.

Research topic

Bone and cartilage metabolism, Cardiovascular disease, Renal disease

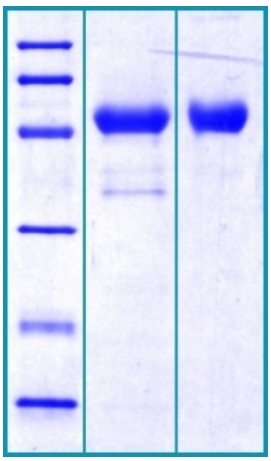
Source

Human plasma

Purity

>95%

SDS-PAGE gel



14% SDS-PAGE separation of Human Fetuin
1. M.W. marker - 97, 66, 45, 31, 21, 14 kDa
2. reduced and heated sample, 5µg/lane
3. non-reduced and non-heated sample, 5µg/lane

Endotoxin

< 1.0 EU/ug

Formulation

Filtered (0.4 µm) and lyophilized from 0.5 mg/mL solution in 20 mM Tris buffer, 200 mM NaCl, pH 8.0

Reconstitution

Add deionized water to prepare a working stock solution of approximately 0.5 mg/mL and let the lyophilized pellet dissolve completely. Product is not sterile! Filter your culture media/working solutions containing this product before using in cell culture.

Shipping

At ambient temperature. Upon receipt, store the product at the temperature recommended below.

Storage, Stability/Shelf Life

Store the lyophilized protein at -80 °C. Lyophilized protein remains stable until the expiry date when stored at -80 °C. Aliquot reconstituted protein to avoid repeated freezing/thawing cycles and store at -80 °C for long term storage. Reconstituted protein can be stored at 4 °C for 4 days.

Quality Control Test

BCA to determine quantity of the protein.
SDS PAGE to determine purity of the protein.
LAL test to determine quantity of endotoxin.

Applications

Cell culture and/or animal studies, ELISA, Western blotting

Note

All blood samples used for protein preparation were tested and found negative for HBsAg, anti-HCV, anti-HBc and anti-HIV 1 and 2. Since no test can absolutely assure the absence of all infectious agents, this product should be handled as a potential biohazard. This product is intended for research use only.

HEADQUARTERS: BioVendor Laboratorní medicína, a.s.	Karasek 1767/1	621 00 Brno CZECH REPUBLIC	Phone: +420-549-124-185 Fax: +420-549-211-460	E-mail: Web:	info@biovendor.com sales@biovendor.com www.biovendor.com
AUSTRIA: BioVendor GesmbH	Nußdorfer Straße 20/10	1090 Vienna AUSTRIA	Phone: +43-1-89090-25 Fax: +43-1-89090-2515	E-mail:	infoAustria@biovendor.com
GERMANY, SWITZERLAND: BioVendor GmbH	Otto-Hahn-Straße 16	34123 Kassel GERMANY	Phone: +49-6221-433-9100 Fax: +49-6221-433-9111	E-mail:	infoEU@biovendor.com
USA, CANADA AND MEXICO: BioVendor LLC	128 Bingham Rd. Suite 1300	Asheville, NC 28806 USA	Phone: +1-828-575-9250 +1-800-404-7807 Fax: +1-828-575-9251	E-mail:	infoUSA@biovendor.com
CHINA - Mainland Office: BioVendor Laboratories Ltd	Room 2917, 29/F R & F Ying Feng Plaza No.2 Huaqiang road	Pearl River New Town Guang Zhou, CHINA	Phone: +86-20-38065519 Fax: +86-20-38065529	E-mail:	infoCN@biovendor.com