

# Fetuin-A (AHSG) Human, Goat Polyclonal Antibody

## **Product Data Sheet**

Source of Antigen: Human serum Cat. No.:

**Host:** Goat RD184036100 (0.1 mg)

Other names: Alpha-2-HS-glycoprotein, Ba-alpha-2-glycoprotein, Alpha-2-Z-globulin, Fetuin A, AHSG, FETUA, PRO2743

# Research topic

Bone and cartilage metabolism, Cardiovascular disease, Renal disease

## Preparation

The antibody was raised in goat by immunization with the Human Fetuin.

# **Species Reactivity**

Human

Not yet tested in other species.

## **Purification Method**

Immunoaffinity chromatography on a column with immobilized purified Human Fetuin.

## **Antibody Content**

0.1 mg (determined by BCA method, BSA was used as a standard)

#### **Formulation**

The antibody is lyophilized in 0.05 M phosphate buffer, 0.1 M NaCl, pH 7.2. AZIDE FREE.

### Reconstitution

Add 0.1 ml of deionized water and let the lyophilized pellet dissolve completely. Slight turbidity may occur after reconstitution, which does not affect activity of the antibody. In this case clarify the solution by centrifugation.

## Shipping

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

# Storage/Stability

The lyophilized antibody remains stable and fully active until the expiry date when stored at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles and store frozen at -80°C. Reconstituted antibody can be stored at 4°C for a limited period of time; it does not show decline in activity after one week at 4°C.

#### **Expiration**

See vial label.

## Lot Number

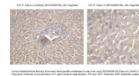
See vial label.

## **Quality Control Test**

Indirect ELISA - to determine titer of the antibody SDS PAGE - to determine purity of the antibody

## **Applications**

### **Antibodies application**



## 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.

#### References to this Product

- Fisher E, Stefan N, Saar K, Drogan D, Schulze MB, Fritsche A, Joost HG, Haring HU, Hubner N, Boeing H, Weikert C.
  Association of AHSG gene polymorphisms with fetuin-A plasma levels and cardiovascular diseases in the EPIC Potsdam study. Circ Cardiovasc Genet. 2009 Dec;2 (6):607-13
- Weikert C, Stefan N, Schulze MB, Pischon T, Berger K, Joost HG, Haring HU, Boeing H, Fritsche A. *Plasma Fetuin-A Levels and the Risk of Myocardial Infarction and Ischemic Stroke*. Circulation. 2008 Nov 24;
- Stefan N, Fritsche A, Weikert C, Boeing H, Joost HG, Haring HU, Schulze MB. Plasma Fetuin-A Levels and the Risk of Type 2 Diabetes. Diabetes. 2008 Jul 15;
- Roos M, Lutz J, Salmhofer H, Luppa P, Knauss A, Braun S, Martinof S, Schomig A, Heemann U, Kastrati A, Hausleiter J. Relation between plasma fibroblast growth factor-23, serum fetuin-A levels and coronary artery calcification evaluated by multislice computed tomography in patients with normal kidney function. Clin Endocrinol (Oxf). 2008 Apr;68 (4):660-5

# Note

This product is for research use only.

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