

Datasheet for ABIN7317918
Fetuin A Protein (His tag)



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Overview

Quantity:	100 µg
Target:	Fetuin A (AHSG)
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This Fetuin A protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human Fetuin-A/AHSG Protein (His Tag)(Active)
Sequence:	Met 1-Val 367
Characteristics:	A DNA sequence encoding the human Fetuin A (NP_001613.2) (Met 1-Val 367) precursor was expressed with a C-terminal polyhistidine tag.
Purity:	> 97 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.
Biological Activity Comment:	1. Measured by its binding ability in a functional ELISA. Immobilized human FCN1 at 10 µg/ml can bind biotinylated recombinant human Fetuin-A with a linear range of 16-2000 ng/ml.2. Measured by its ability to inhibit active Cathepsin V cleavage of a fluorogenic peptide substrate Z-LR-AMC, R&D Systems, Catalog # ES008. The IC50 value is < 100 nM.

Target Details

Target:	Fetuin A (AHSG)
Alternative Name:	Fetuin-A/AHSG (AHSG Products)
Background:	Background: Fetuin-A, also known as Alpha-2-HS-Glycoprotein (AHSG), belongs to the Fetuin family, is a plasma binding protein, and is more abundant in fetal than adult blood. It is involved in several functions, such as endocytosis, brain development and the formation of bone tissue. Fetuins are carrier proteins like albumin. Fetuin-A forms soluble complexes with calcium and phosphate and thus is a carrier of otherwise insoluble calcium phosphate. Thus Fetuin-A is a potent inhibitor of pathological calcification. The circulating levels of fetuin-A, a well-described inhibitor of calcification, regulate the cell-dependent process of osteogenesis. The low circulating fetuin-A levels are associated with a greater prevalence and/or severity of Vascular calcification (VC) and increased risk for all-cause and cardiovascular mortality. However, high circulating fetuin-A levels appear to induce insulin resistance and, in non-dialyzed subjects with diabetic nephropathy, are directly related to VC burden. The emerging role of fetuin-A deficiency as a risk factor in dialysis patients was documented in cross-sectional studies demonstrating a significant correlation with all-cause and cardiovascular mortality. Additionally, Human fetuin-A is a negative acute phase protein involved in inflammatory diseases, thus being a potential physiological regulator of meprin activity. Fetuin-A is a broad-range protease inhibitor. Fetuin-A and cystatin C as endogenous proteolytic regulators of meprin activity broadens our understanding of the proteolytic network in plasma. Synonym: Alpha-2-HS-Glycoprotein, Alpha-2-Z-Globulin, Ba-Alpha-2-Glycoprotein, Fetuin-A, AHSG, FETUA
Molecular Weight:	38.8 kDa
NCBI Accession:	NP_001613

Application Details

Restrictions:	For Research Use only
Handling	
Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile PBS, pH 7.2
Storage:	4 °C, -20 °C, -80 °C

Handling

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.