

Fetuin A Recombinant Protein | AHSG recombinant protein

Fetuin A Protein, Human, Recombinant (His Tag)

CATALOG #
AAA257868

HOST
Human Cells

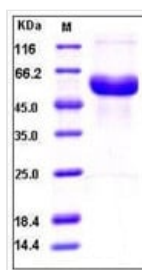
PRODUCT SYNONYMS

Fetuin A; Fetuin A Protein; Human; Recombinant (His Tag); Human Fetuin-A/AHSG/FETUA Protein (His Tag); A2HS Protein; AHS Protein; FETUA Protein; HSGA Protein; alpha-2-HS-glycoprotein; AHSG recombinant protein

PRODUCT SPECIFICATIONS

Host	Human Cells
Purity/Purification	>97% as determined by SDS-PAGE
Form/Format	Lyophilized from sterile PBS, pH7.5. 5% Trehalose, 5% mannitol, 0.01% Tween-80
Sequence	Met1-Val367
Source	Human
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	Ala 19
Tag	C-His
Protein Construction	A DNA sequence encoding the human Fetuin A (NP_001613.2)(Met 1-Val 367) precursor was expressed with a C-terminal polyhistidine tag.
Reconstitution	It is recommended that sterile water (400ul) be added to the vial to prepare a stock solution of 0.25mg/mL. Concentration is measured by UV-Vis.
Preparation and Storage	Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage. Avoid repeated freeze-thaw cycles.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for AHSG recombinant protein	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.
References	Mehrotra R. (2007) Emerging role for fetuin-A as contributor to morbidity and mortality in chronic kidney disease. Kidney Int. 72(2): 137-40.Westenfeld R, et al. (2007) Vascular calcification and fetuin-A deficiency in chronic kidney disease. Trends Cardiovasc Med. 17(4): 124-8.Heiss A, et al. (2008). Hierarchical role of fetuin-A and acidic serum proteins in the formation and stabilization of calcium phosphate particles. J Biol Chem. 283 (21): 14815-25.Jahnen-Dechent W, et al. (2008). Mineral chaperones: a role for fetuin-A and osteopontin in the inhibition and regression of pathologic calcification. J Mol Med. 86 (4): 379-89.Hedrich J, et al. (2010) Fetuin-A and cystatin C are endogenous inhibitors of human meprin metalloproteases. Biochemistry. 49(39): 8599-607.

NCBI AND UNIPROT INFORMATION

NCBI GI #	156523970
NCBI GeneID	197
NCBI Accession #	NP_001613.2
NCBI GenBank Nucleotide #	NM_001622.2
UniProt Accession #	P02765; O14961; O14962; Q9P152; A8K9N6; B2R7G1; AAB29984
NCBI Official Full Name	alpha-2-HS-glycoprotein preproprotein
NCBI Official Synonym Full Names	alpha-2-HS-glycoprotein
NCBI Official Symbol	AHSG
NCBI Official Synonym Symbols	AHS; A2HS; HSGA; FETUA
NCBI Protein Information	alpha-2-HS-glycoprotein; fetuin-A; alpha-2-Z-globulin; ba-alpha-2-glycoprotein
UniProt Protein Name	Alpha-2-HS-glycoprotein
UniProt Gene Name	AHSG
UniProt Synonym Gene Names	FETUA
UniProt Entry Name	FETUA_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.