

# Human cell<sup>exp</sup> Fetuin A/ASHG, Human Recombinant

<b>CATALOG #:</b>	7142-10	10 µg
	7142-50	50 µg
<b>ALTERNATE NAMES:</b>	Alpha-2-HS-glycoprotein, Alpha-2-Z-globulin, Ba-alpha-2-glycoprotein	
<b>SOURCE:</b>	HEK293 cells	
<b>PURITY:</b>	≥ 95% by SDS-PAGE gel and HPLC analyses	
<b>MOL. WEIGHT:</b>	45-55 kDa	
<b>ENDOTOXIN LEVEL:</b>	< 0.1 ng/µg of protein (<1EU/µg).	
<b>FORM:</b>	Lyophilized	
<b>FORMULATION:</b>	Sterile filtered through a 0.2 micron filter. Lyophilized from 10 mM Sodium Phosphate, pH 7.8.	
<b>STORAGE CONDITIONS:</b>	Store at -20°C. After reconstitution, aliquot and store at -20°C to -80°C. Avoid repeated freezing and thawing cycles.	

**RECONSTITUTION:**

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

**DESCRIPTION:**

Fetuin A/AHSG is a human plasma glycoprotein belonging to the Cystatin family of proteases inhibitors. It is highly expressed in embryonic cells and adult hepatocytes, and is expressed to a lesser extent in monocytes/macrophages. Fetuin A/AHSG is a major serum protein component that exerts various calcium dependent physiological activities, and can mediate growth signaling in certain tumor cells. It also can act as a natural antagonist against specific TGF-β and BMP signaling proteins. Recombinant human

Fetuin-A is a heterodimeric protein containing a 282 amino acid A chain and a 27 amino acid B chain. Due to glycosylation, recombinant Fetuin-A migrates at an apparent molecular weight of 45 – 55 kDa by SDS-PAGE run under non-reducing conditions.

**BIOLOGICAL ACTIVITY:** Determined by its ability to inhibit

Cathepsin V cleavage of a fluorogenic peptide substrate ZLR-AMC (RLUs). The expected IC<sub>50</sub> is ≤ 100nM.

**AMINO ACID SEQUENCE:**

**A-Chain:** APHGPGLIYR QPNCDDPETE EAALVAIDYI NQNLPWGYKH TLNQIDEVKV  
WPQQPSGELF EIEIDTLETT CHVLDPTVA RCSVRQLKEH AVEGDCDFQL  
LKLDGKFSVY YAKCDSSPDS AEDVRKVCQD CPLLAPLNDT RVVHAAKAAL  
AAFNAQNNGS NFQLEEISRA QLVPLPPSTY VEFTVSGTDC VAKEATEAAK  
CNLLAEKQYG FCKATLSEKL GGAEVAVTCT VFQTQPVT SQ PQPEGANEAV  
PTPVVDPDAP PSPPLGAPGL PPAGSPDSDH VL  
**B-Chain:** TVVQPSVGAA AGPVVPPCPG RIRHFKV

**RELATED PRODUCTS:**

- Human Recombinant Cystatin C (**Cat. No. 4878-10, -50**)
- Cystatin A Antibody (Clone WR 23/2/3/3) (**Cat. No. 3486-100**)
- Cystatin B Antibody (Clone RJMW2E7) (**Cat. No. 3487-100**)

**FOR RESEARCH USE ONLY! Not to be used in humans.**