

# Cytokines

## Human Recombinant Fetuin A

Fetuin A, His tag



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Catalog #100-1323

100 µg

## Product Description

Fetuin A, also known as alpha-2-HS-glycoprotein (AHSG), is a plasma glycoprotein belonging to the cystatin superfamily of cysteine protease inhibitors (Brown and Dziegielewska). It contains a His-residue tag at the carboxyl end of the polypeptide chain. Fetuin A forms soluble complexes with calcium and phosphate, mediating the clearance of calcium phosphate in the body and preventing ectopic calcification (Heiss et al.; Price & Lin). In addition to its role in calcium phosphate binding, fetuin A has also been demonstrated to play a role in lipid transport by acting as a carrier (Kumbula et al.). In cell-based assays, fetuin A has been suggested to protect against lethal systemic infection by inhibiting high mobility group box 1 (HMGB1) protein accumulation and release (Li et al.). It also acts as a natural antagonist against specific TGF- $\beta$  and BMP signaling proteins, blocking osteogenic differentiation of rat bone marrow cells (Demetriou et al.).

## Product Information

**Alternative Names:** A2HS, AHS, AHSG, FETUA, HSGA

**Accession Number:** NP\_001613.2 (Ala19-Val367) was expressed with a polyhistidine tag at the C-terminus.

**Amino Acid Sequence:** APHGPGLIYR QPNCDDPETE EAALVAIDYI NQNLPGWYKH TLNQIDEVKV WPQQPSGELF EIEIDTLETT CHVLDPTPVA RCSVRQLKEH AVEGDCCDFQL LKLDGKFSVY YAKCDSSPDS AEDVRKVCQD CPLLAPLNDT RVVHAAKAAL AAFNAQNNGS NFQLEEISRA QLVPLPPSTY VEFTVSGTDC VAKEATEAAK CNLLAEKQYG FCKATLSEKL GGAEVAVTCT VFQTQPVTSQ PQPEGANEAV PTPVVDPDAP PSPPLGAPGL PPAGSPPDSH VLLAAPPGHQ LHRAHYDLRH TFMGVVSLGS PSGEVSHPRK TRTVVQPSVG AAAGPVVPPC PGRIHFKVA HHHHHHHHHH

**Predicted Molecular Mass:** 38.8 kDa

**Species:** Human

**Formulation:** Lyophilized from sterile PBS, pH 7.2. Trehalose (5 - 8%), mannitol, and 0.01% TWEEN® 80 are normally added as protectants before lyophilization.

**Source:** HEK293 cells

## Specifications

**Activity:** Not available

**Purity:**  $\geq$  94%

**Endotoxin Level:** Measured by kinetic Limulus amoebocyte lysate (LAL) analysis and is  $\leq$  1 EU/µg protein.

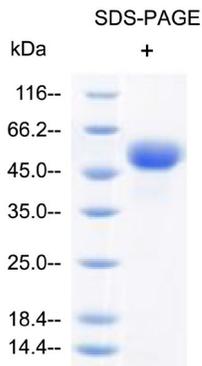
## Preparation and Storage

**Storage:** Store at -20 to -80°C.

**Stability:** Stable as supplied for 12 months from date of receipt.

**Preparation:** Centrifuge vial before opening. Reconstitute the product in sterile water to at least 0.25 mg/mL by pipetting the solution down the sides of the vial. Do not vortex. As a general guide, do not store at 2 - 8°C for more than 1 month or at -80°C for more than 3 months. Avoid repeated freeze-thaw cycles.

## Data



Human Recombinant Fetuin A was resolved with SDS-PAGE under reducing (+) conditions and visualized by Coomassie Blue staining. Human Recombinant Fetuin A has a predicted molecular mass of 38.8 kDa but an apparent molecular mass of 55 - 60 kDa due to glycosylation.

## Related Products

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## References

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