

## Zinc Alpha 2 Glycoprotein/AZGP1 Protein, Human, Recombinant (His)

### General Information

|                       |  |
|-----------------------|--|
| Synonyms:             | ZAG; $\alpha$ -2-glycoprotein 1, zinc-binding;Zinc $\alpha$ 2;ZA2G;alpha-2-glycoprotein 1, zinc-binding  |
| Protein Construction: | A DNA sequence encoding the human AZGP1 (P25311) (Met1-Ser298) with a C-terminal polyhistidine tag was expressed. Predicted N terminal: Gln 21 |
| Species:              | Human  |
| Expression Host:      | HEK293 Cells   |
| Accession:            | P25311   |
| Molecular Weight:     | 33.6 kDa (predicted); 41 kDa (reducing conditions)   |

### QC Testing

|                      |   |
|----------------------|---|
| Biological Activity: | Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.  |
| Purity:              | > 95 % as determined by SDS-PAGE  |
| Endotoxin:           | < 1.0 EU/ $\mu$ g of the protein as determined by the LAL method.   |
| Formulation:         | Lyophilized from a solution filtered through a 0.22 $\mu$ m filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization. |

### Preparation and Storage

|                      |  |
|----------------------|--|
| Reconstitution:      | Reconstituted with sterile deionized water to 0.25 mg/mL. Reconstitution conditions may vary depending on the lot.   |
| Stability & Storage: | It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.<br><small>Actual storage temperature shall be subject to the COA.</small> |
| Shipping:            | In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.   |

### Protein Background

Alpha-2-glycoprotein, also known as AZGP1, belongs to the MHC class I family. It can be detected in body fluids such as serum, sweat, and seminal and breast cyst fluids. It has been shown that alpha-2-glycoprotein can stimulate lipolysis by adipocytes in vivo and in vitro. Thus it is believed that alpha-2-glycoprotein plays an important role in the regulation of body weight, and age-dependent changes in genetically influenced obesity, and it also regulates melanin production by normal and malignant melanocytes. Alpha-2-glycoprotein is

produced by both white and brown fat adipocytes and may act in a local autocrine fashion in the reduction of adiposity in cachexia.

### Reference

Tada T, et al. (1991) Immunohistochemical localization of Zn-alpha 2-glycoprotein in normal human tissues. *J Histochem Cytochem.* 39(9):1221-6.

Vanni H, et al. (2009) Cigarette Smoking Induces Overexpression of a Fat-Depleting Gene AZGP1 in the Human. *Chest.* 135(5):1197-208.

Ueyama H, et al. (1991) Cloning and nucleotide sequence of a human Zn-alpha 2-glycoprotein cDNA and chromosomal assignment of its gene. *Biochem Biophys Res Commun.* 177(2):696-703.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286 E\_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481