

General Information

Protein Construction

A DNA sequence encoding the human SerpinA1 (NP_000286.3) pre-protein (Met 1-Lys 418) was expressed with a C-terminal polyhistidine tag.

Organism

Human

Expression Host

Human Cells

QC Testing

Activity

Measured by its ability to inhibit trypsin cleavage of a fluorogenic peptide substrate, Mca-RPKPVE-Nval-WRK(Dnp)-NH₂ (Anaspec, Catalog#27114). The IC₅₀ value is < 3.0 nM, as measured in 100µL reaction mixture containing 1.25 ng trypsin (Sigma, Catalog#T1426), 10 µM substrate, 50 mM Tris, 10 mM CaCl₂, 0.15 M NaCl, pH 7.5.

Purity

> 97 % as determined by SDS-PAGE

Endotoxin

< 1.0 EU per µg of the protein as determined by the LAL method

Stability

Samples are stable for up to twelve months from date of receipt at -70°C

Predicted N terminal

Glu 25

Molecular Mass

The secreted mature form of recombinant human SerpinA1 consists of 405 amino acids and has a calculated molecular mass of 45.7 kDa. Due to glycosylation, the rhSerpinA1 migrates as an approximately 55-60 kDa protein in SDS-PAGE analysis under reducing conditions.

Formulation

Lyophilized from sterile PBS, pH 7.4

1. 5 % trehalose and mannitol are added as protectants before lyophilization.

2. Please contact us for any concerns or special requirements.

Usage Guide

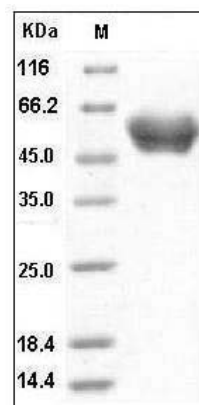
Storage

Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

Reconstitution

Adding sterile water, prepare a stock solution of 0.25 mg/ml. Concentration is measured by UV-Vis.

SDS-PAGE



Human SerpinA1 / A1AT Protein (His Tag) SDS-PAGE