

RP00194

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Recombinant Human Serpin A3/Alpha-1-antichymotrypsin Protein

Catalog No.: RP00194

Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
Human	12	P01011

Tags

C-His

Synonyms

AACT; ACT; GIG24;
GIG25;SERPINA3;ACT;GIG24;GIG25

Product Information

Source	Purification
HEK293 cells	> 97% by SDS-PAGE.

Endotoxin

< 0.1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.22 μm filtered solution of 20mM HEPES, 150mM NaCl, pH 8.0. Contact us for customized product form or formulation.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact



www.abclonal.com

Background

SerpinA3, also known as Alpha 1-antichymotrypsin (AACT), is a plasma alpha globulin glycoprotein, and is a member of serpin superfamily of the serine protease inhibitors. It is synthesized primarily in the liver and secreted as one of the most abundant serpins in plasma. SerpinA3 deficiency has been associated with liver disease, and mutations of this gene have been observed in patients with Parkinson disease and chronic obstructive pulmonary disease. Serpin A3 is a major constituent of the plaques associated with Alzheimer's disease and an inhibitor of amyloid beta peptide degradation.

Basic Information

Description

Recombinant Human Serpin A3/Alpha-1-antichymotrypsin Protein is produced by HEK293 expression system. The target protein is expressed with sequence (Asn26-Ala423) of human Serpin A3/AACT (Accession #NP_001076.2) fused with a 6×His tag at the C-terminus.

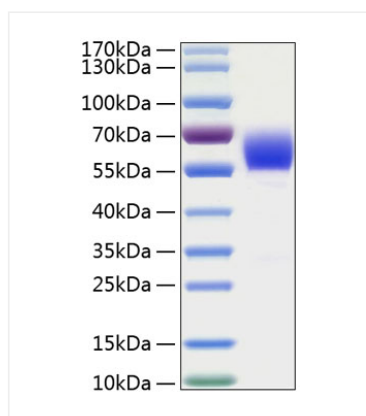
Bio-Activity

Measured by its ability to inhibit chymotrypsin cleavage of a fluorogenic peptide substrate MCA-RPKPVE-Nval-WRK(Dnp)-NH₂. The IC₅₀ value is <11.5 nM.

Storage

Store the lyophilized protein at -20°C to -80 °C for long term. After reconstitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1 week. Avoid repeated freeze/thaw cycles.

Validation Data



Recombinant Human Serpin A3/Alpha-1-antichymotrypsin Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 55-70 kDa.