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Datasheet for ABIN7197948
SERPINA3 Protein (His tag)

Overview

Quantity:	100 µg
Target:	SERPINA3
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This SERPINA3 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human SerpinA3/AAT Protein (His Tag)(Active)
Sequence:	Met 1-Ala 423
Characteristics:	A DNA sequence encoding the human SERPINA3 (NP_001076.2) (Met 1-Ala 423) was expressed, with a C-terminal polyhistidine tag.
Purity:	> 97 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.
Biological Activity Comment:	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 < 5 nM.

Target Details

Target:	SERPINA3
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Target Details

Alternative Name: SerpinA3/AACT ([SERPINA3 Products](#))

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 consisting of at least 35 members. SerpinA3 has been demonstrated to inhibit the activity of certain serine proteases, such as cathepsin G found in neutrophils, and chymases present in mast cells, by inducing a major conformational rearrangement, and thus protects some tissues from damage caused by proteolytic enzymes. This enzyme is produced primarily in the liver, and is identified as an acute-phase inflammatory protein. 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. In addition, ACT gene polymorphism has been implicated with Alzheimer's disease (AD), cerebral amyloid angiopathy (CAA), as well as stroke, since SerpinA3 is a major constituent of the plaques in AD and an inhibitor of amyloid beta peptide degradation.

Synonym: Alpha-1-Antichymotrypsin, ACT, Cell Growth-Inhibiting Gene 24/25 Protein, Serpin A3, SERPINA3, AACT,GIG24,GIG25,MGC88254,SERPINA3

Molecular Weight: 46.5 kDa

NCBI Accession: [NP_001076](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from sterile 25 mM HEPES, 0.15M NaCl, pH 7.8

Storage: 4 °C,-20 °C,-80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.