

Native Human SERPINA1 Protein, GMP Grade

Product Information

Cat#

SERPINA1-078THP

Common Name

SERPINA1

Product Name

Native Human SERPINA1 Protein, GMP Grade

Product Overview

Native Human SERPINA1 Protein was purified from human plasma and was produced in an animal component free process under cGMP guidelines.

Description

The protein encoded by this gene is a serine protease inhibitor belonging to the serpin superfamily whose targets include elastase, plasmin, thrombin, trypsin, chymotrypsin, and plasminogen activator. This protein is produced in the liver, the bone marrow, by lymphocytic and monocytic cells in lymphoid tissue, and by the Paneth cells of the gut. Defects in this gene are associated with chronic obstructive pulmonary disease, emphysema, and chronic liver disease. Several transcript variants encoding the same protein have been found for this gene.

Source

human plasma

Species

Human

Bio-activity

25 mg/mL

Molecular Mass

44324.5 Da

Native Human SERPINA1 Protein, GMP Grade

AA Sequence

EDPQGDAAQKTDTSHHDDQDHPTFNKITPNLAFAFSLYRQLAHQSNSTNIFFSPVSIATAFAMLSLGTKADTHDE
ILEGLNFNLTIEPAQIHEGFQELLRTLNQPDSQLQLTTGNGLFLSEGLKLVDFLEDVKKLYHSEAFTVNFGDTEE
AKKQINDYVEKGTQGGKIVDLVKELDRDVFALVNYIFFKGKWERPFVEVKDTEEDFHVDQVTTVKVPMMKRLG
MFNIQHCKKLSSWVLLMKYLG NATAIFFLPDEGKLQHLENELTHDIITKFLNEDRRSASLHLPKLSITGTDLKSVL
GQLGITKVFSGADLSGVTEEAPLKLSKAVHKAVLTIDEKGTEAAGAMFLEAIPMSIPPEVKFNKPFVFLMIEQN
TKSPLFMGKVVNPTQK

Endotoxin

<0.001 EU/μg by the LAL method

Purity

> 99 % by SDS-PAGE and HPLC analysis

Applications

For chronic augmentation and maintenance therapy in individuals with alpha1-proteinase inhibitor (A1-PI) deficiency and clinical evidence of emphysema.

Usage

Alpha1-proteinase inhibitor (A1-PI) deficiency

Storage

Lyophilized protein should be stored at < -20 centigrade, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 2-8 centigrade for 1 week. Aliquots of reconstituted samples are stable at < -20 centigrade for 3 months.

Gene Name

[SERPINA1 serpin peptidase inhibitor, clade A \(alpha-1 antiproteinase, antitrypsin\), member 1 \[Homo sapiens \(human\)\]](#)

Official Symbol

[SERPINA1](#)

Synonyms

Native Human SERPINA1 Protein, GMP Grade

SERPINA1; serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 1; PI, serine (or cysteine) proteinase inhibitor, clade A (alpha 1 antiproteinase, antitrypsin), member 1; alpha-1-antitrypsin; A1A; A1AT; AAT; alpha 1 antitrypsin; alpha1AT; PI1; protease inhibitor 1 (anti elastase); serpin A1; alpha-1-antiproteinase; alpha-1-antitrypsin null; alpha-1 protease inhibitor; protease inhibitor 1 (anti-elastase), alpha-1-antitrypsin; serine (or cysteine) proteinase inhibitor, clade A, member 1; PI; PRO2275; MGC9222; MGC23330;

GeneID

[5265](#)

mRNA Refseq

[NM_000295](#)

Protein Refseq

[NP_000286](#)

MIM

[107400](#)

UniProt ID

[P01009](#)
