

32-7484: Recombinant Human Serpin A1/alpha-1-Antitrypsin (C-6His)

Gene : SERPINA1

Gene ID : 5265

Uniprot ID : P01009

Description

Source: Human Cells.

MW :45.35kD.

Recombinant Human Serpin A1 is produced by our Mammalian expression system and the target gene encoding Glu25-Lys418 is expressed with a 6His tag at the C-terminus. Serpin A1 is a prototype member of the Serpin superfamily of the serine protease inhibitors. As one of the most abundant proteinase inhibitors in the circulation, it is synthesized in hepatocytes, and to a lesser extent, in macrophages as well as intestinal epithelial cell lines and secreted as the abundant proteinase inhibitor in the circulation whose targets include elastase, plasmin, thrombin, trypsin, chymotrypsin, and plasminogen activator. Point mutations in the native SerpinA1 variants result in Serpin A1 deficiency, and consequently lead to several clinical complications such as pulmonary emphysema, juvenile hepatitis, cirrhosis, and hepatocellular carcinoma. For example, the Z variants (Glu342 to Lys) forms intracellular inclusion bodies, is not secreted, and leads to a severe SerpinA1 deficiency. Accordingly, Serpin A1 deficiency in circulation is associated with emphysema or liver disease.

Product Info

Amount : 10 µg / 50 µg

Content : Lyophilized from a 0.2 µm filtered solution of 20mM TrisHCl, 150mM NaCl, 2mM CaCl₂, pH 7.5.

Storage condition : Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.

Amino Acid : EDPQGDAAQKTDTSHHDDQDHTFNKITPNLAFAFSLYRQLAHQSNSTNIFFSPVSIATAFAMLSLGTKADTHD
EILEGLNFNLTIEPAQIHEGFQELLRTLNPDSQLQLTTGNGLFLSEGLKLVDFLEDVKKLYHSEFTVNFGDT
EEAKKQINDYVEKGTQGKIVDLVKELDRDTVFALVNYIFFKGKWERPFVKDTEEDFHVDQVTTVKVPMMKRL
GMFNIQHCKKLSSWVLLMKYLGNATAIFFLPDEGKLQHLENELTHDIITKFLNEDRRSASLHLPKLSITGTDLK
SVLGQLGITKVFSNGADLSGVTEEAPLKLSKAVHKAVLTIDEKGTEAAGAMFLEAIPMSIPPEVKFNKPFVFLMID
QNTKSPLFMGKVVNPTQKVDHHHHHH

Application Note

Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 µg/ml. Dissolve the lyophilized protein in ddH₂O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Endotoxin : Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.