

Human CellExp SERPINA1 /A1AT, human recombinant protein

SerpinA1, PI, A1A, AAT, PI1, A1AT, MGC9222, PRO2275, MGC23330 α 1AT, SPAAT
Catalog # PBV10865r

Specification**Human CellExp SERPINA1 /A1AT, human recombinant protein - Product info**

Primary Accession
Calculated MW

[P01009](#)

The protein is fused with 6 \times His tag at the C-terminus, has a calculated MW of 45.1 kDa. The predicted N-terminus is Glu 25. DTT-reduced Protein migrates as 55-60 kDa due to glycosylation. KDa

Human CellExp SERPINA1 /A1AT, human recombinant protein - Additional Info

Gene ID

5265

Gene Symbol

SERPINA1

Other Names

SerpinA1, PI, A1A, AAT, PI1, A1AT, MGC9222, PRO2275, MGC23330 α 1AT, SPAAT

Gene Source

Human

Source

HEK 293 cells

Assay&Purity

SDS-PAGE; \geq 95%

Assay2&Purity2

HPLC;

Recombinant

Yes

Target/Specificity

SERPINA1

Application Notes

Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 μ g/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

Format

Lyophilized powder

Storage

-20°C; Lyophilized from 0.22 μ m filtered solution in PBS. Generally 5-8% Mannitol or trehalose is added as a protectant before lyophilization.

Human CellExp SERPINA1 /A1AT, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Human CellExp SERPINA1 /A1AT, human recombinant protein - Images

Human CellExp SERPINA1 /A1AT, human recombinant protein - Background

Serpin A1 also known as Alpha-1-antitrypsin (A1AT), serum trypsin inhibitor, alpha-1 proteinase inhibitor (A1PI), AAT, which belongs to the serpin family. Most serpins inactivate enzymes by binding to them covalently, requiring very high levels to perform their function. Like all serine protease inhibitors, A1AT has a characteristic secondary structure of beta sheets and alpha helices. Serpin A1 / A1AT is inhibitor of serine proteases. Its primary target is elastase, but it also has a moderate affinity for plasmin and thrombin. Irreversibly inhibits trypsin, chymotrypsin and plasminogen activator. The aberrant form of SerpinA1 inhibits insulin-induced NO synthesis in platelets, decreases coagulation time and has proteolytic activity against insulin and plasmin. Serpin A1 / A1AT protects tissues from enzymes of inflammatory cells, especially neutrophil elastase. Defects in SERPINA1 are the cause of alpha-1-antitrypsin deficiency (A1ATD).

Human CellExp SERPINA1 /A1AT, human recombinant protein - References

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Rosenberg S.,et al.Nature 312:77-80(1984).
Ciliberto G.,et al.Cell 41:531-540(1985).
Nukiwa T.,et al.J. Biol. Chem. 261:15989-15994(1986).