

## 32-4805: Human Alpha-1 Antitrypsin

**Alternative Name :** Alpha-1-antitrypsin, Alpha-1 protease inhibitor, Alpha-1-antiproteinase, SERPINA1, A1AT, PI, A1A, AAT, PI1, MGC9222, PRO2275, MGC23330.

### Description

Source : SERPINA1 extracted from human serum and having a 52kDa molecular weight is purified by proprietary chromatographic techniques. SERPINA1 is secreted and is a serine protease inhibitor which its targets include elastase, plasmin, collagenase, thrombin, leucocytic proteases, trypsin, chymotrypsin, and plasminogen activator. Defects in SERPINA1 gene can cause emphysema or liver disease. Antral SERPINA1 expression is particularly induced by H. pylori infection. Lung and prostate cancers have shown a significant increase in SERPINA1 serum levels compared with healthy controls though breast cancers did not show a significant change. SERPINA1 is an endogenous inhibitor of serine proteases and inhibits the catalytic domain of human recombinant matriptase in vitro. Rise in SERPINA1 occurs as an acute phase response to tissue necrosis and inflammation. Mutations in SERPINA1 and SLC11A1 genes change the balance between elastase produced by leukocytes during phagocytosis.

### Product Info

**Amount :** 0.5 mg  
**Purification :** Greater than 95% as determined by SDS-PAGE.  
**Content :** SERPINA1 is lyophilized in PBS pH 7.4.  
**Storage condition :** Lyophilized SERPINA1 should be stored at 4°C.

### Application Note

It is recommended to reconstitute the lyophilized SERPINA1 in sterile 18M-cm H<sub>2</sub>O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

