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# **Product Datasheet**

Product Name Alpha-1 AntiChymotrypsin Human

Cata No CB500999
Source Human Serum

Synonyms Alpha-1-antichymotrypsin, ACT, Cell growth-inhibiting gene 24/25 protein,

SERPINA3, AACT, A1ACT, GIG24, GIG25, MGC88254.

#### **Description**

Alpha 1 ACT is an early-stage acute-phase plasma protein and a serpin that preferentially inactivates chymotrypsin, cathepsin G, and chymase. Alpha-1-ACT, a serine protease inhibitor, is tightly associated with amyloid plaques in Alzheimer's disease (AD) and in normal aged human and monkey brain.

Regulation of the serine proteases and serine protease inhibitors plays an important role in neuromuscular differentiation. Prostate specific antigen (PSA), a chymotrypsin-like serine protease, is predominantly complexed to Alpha-1-ACT. Human Alpha-1 AntiChymotrypsin produced from normal human serum having a molecular mass of 68kDa.

## **Physical Appearance**

Sterile Filtered White lyophilized (freeze-dried) powder.

## **Purity**

Greater than 99.0%.

#### **Formulation**

Lyophilized from 0.02M NH<sub>4</sub>HCO<sub>3</sub>.

#### Reconstitution

It is recommended to reconstitute the lyophilized human A1ACT in phosphate buffer pH > 7.0 containing 0.15M NaCl.

### **Stability**

Human A1ACT although stable at room temperature for 3 weeks, should be stored between 2-8℃.