

Alpha 1 Antichymotrypsin, Human Plasma recombinant protein
Cell growth-inhibiting gene 24/25 protein, Serpin A3, SERPINA3, AACT, GIG24, GIG25
Catalog # PBV10917r

Specification

Alpha 1 Antichymotrypsin, Human Plasma recombinant protein - Product info

Primary Accession [P01011](#)
Calculated MW 64 kDa

Alpha 1 Antichymotrypsin, Human Plasma recombinant protein - Additional Info

Gene ID	12
Gene Symbol	SERPINA3
Other Names	
Cell growth-inhibiting gene 24/25 protein, Serpin A3, SERPINA3, AACT, GIG24, GIG25	
Gene Source	Human
Source	Human Plasma
Assay&Purity	SDS-PAGE; ≥95%
Assay2&Purity2	N/A;
Recombinant	No
Results	Shows 75-100% inhibition when tested with active-site titrated porcine pancreatic trypsin using Na-Benzoyl-L-Arginine-para-Nitroanilide Hydrochloride (L-BAPNA) as substrate.

Target/Specificity
SERPINA3

Application Notes
In water or aqueous buffer

Format
Lyophilized

Storage
-20°C; Lyophilized from 20 mM Tris-HCl, pH 7.4, with 150 mM NaCl.

Alpha 1 Antichymotrypsin, Human Plasma 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](#)

Alpha 1 Antichymotrypsin, Human Plasma recombinant protein - Images

Alpha 1 Antichymotrypsin, Human Plasma recombinant protein - Background

Alpha 1 antichymotrypsin is an acute-phase plasma protein found at 45 mg per 100 ml. ACT functions as a specific inhibitor of chymotrypsin-like serine proteases. Although its physiological function is unclear, it can inhibit neutrophil cathepsin G and mast cell chymase, both of which can convert angiotensin-1 to the active angiotensin-2. Clinically, it is elevated in inflammatory conditions, some malignancies, Crohn's disease, ulcerative colitis, and burn injuries. The PSA-ACT complex level is considered a biomarker for prostate cancer. Defects in this gene may be a cause of chronic obstructive pulmonary disease.

Alpha 1 Antichymotrypsin, Human Plasma recombinant protein - References

Chandra T.,et al.Biochemistry 22:5055-5061(1983).
Poller W.,et al.Genomics 17:740-743(1993).
Kim J.W.,et al.Submitted (DEC-2003) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Totoki Y.,et al.Submitted (MAR-2005) to the EMBL/GenBank/DDBJ databases.