

Product datasheet

Recombinant human AACT protein ab182695

2 Images

Description

Product name	Recombinant human AACT protein
Biological activity	<p>Measured by its ability to inhibit chymotrypsin cleavage of a fluorogenic peptide substrate MCA-RPKPVE-Nval-WRK(Dnp)-NH₂.</p> <p>The IC₅₀ value is <6 nM.</p>
Purity	> 95 % SDS-PAGE.
Endotoxin level	< 1.000 Eu/μg
Expression system	HEK 293 cells
Accession	P01011
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	<p>CHPN SPLDEENLTQENQDRGTHVDLGLASANVDFAFSLY KQLVLKAPDKN VIFSPLSISTALAFSLSLGAHNTTLTEILKGLKFNL TETSEAEIH QSFQHL LR TLNQSSDELQLSMGNAMFVKEQLSLLDRFTEDAKRLY GSEAFATDFQD SAAAKKLINDYVKN GTRGKITDLIKDLDSQTMMLV LVNYIFFK AKWEMPFD PQDTHQSRFYLSKKK WVMVPMMSLHHLTIPYFRDEELSC TVVELKYTGNA SALFILPDQDKMEEVEAMLLPETLKRWRDSLEFREIGELY LPKFSISRDY N LNDILLQLGIEEAFTSKADLSGITGARNLAVSQVVHKAVLD VFEEGT EASAATAVKITLLSALVETRTRVRFNRPFLMIVPTDTQNIFF MSKVTNP KQA</p>
Predicted molecular weight	23 kDa including tags
Amino acids	23 to 423
Tags	His tag C-Terminus

Additional sequence information Mature form. AAH03559.

Specifications

Our [Abpromise guarantee](#) covers the use of **ab182695** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE Functional Studies
Form	Lyophilized

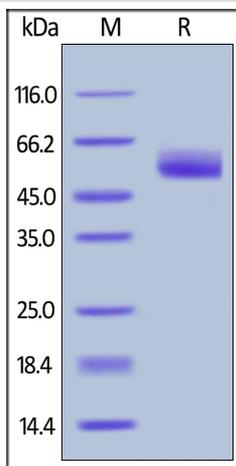
Preparation and Storage

Stability and Storage	Shipped at 4°C. Store at -80°C. Reconstitute for long term storage. pH: 7.4 Constituents: 0.88% Sodium chloride, 0.48% HEPES, 5% Trehalose This product is an active protein and may elicit a biological response in vivo, handle with caution.
Reconstitution	Reconstitute with sterile deionized water to a concentration of 400 µg/ml.

General Info

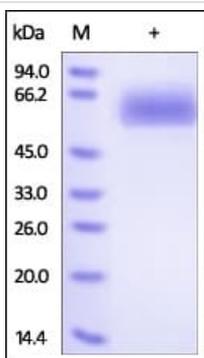
Function	Although its physiological function is unclear, it can inhibit neutrophil cathepsin G and mast cell chymase, both of which can convert angiotensin-1 to the active angiotensin-2.
Tissue specificity	Plasma. Synthesized in the liver. Like the related alpha-1-antitrypsin, its concentration increases in the acute phase of inflammation or infection. Found in the amyloid plaques from the hippocampus of Alzheimer disease brains.
Involvement in disease	Defects in SERPINA3 may be a cause of chronic obstructive pulmonary disease (COPD) [MIM:107280].
Sequence similarities	Belongs to the serpin family.
Domain	The reactive center loop (RCL) extends out from the body of the protein and directs binding to the target protease. The protease cleaves the serpin at the reactive site within the RCL, establishing a covalent linkage between the carboxyl group of the serpin reactive site and the serine hydroxyl of the protease. The resulting inactive serpin-protease complex is highly stable.
Cellular localization	Secreted.

Images



Human Serpin A3 (His Tag) on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

SDS-PAGE - Recombinant human AACT protein (ab182695)



SDS-PAGE analysis of reduced ab182695 stained overnight with Coomassie Blue.

SDS-PAGE - Recombinant human AACT protein (ab182695)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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