

Product datasheet

Recombinant Human alpha 1 Antitrypsin protein ab79181

1 图像

概述

产品名称	重组人alpha 1 Antitrypsin蛋白
蛋白长度	Full length protein

描述

性质	Recombinant
来源	Escherichia coli

氨基酸序列

种属	Human
序列	<p>MEDPQGDAAQ KTDTSHHQD HPTFNKITPN          LAEFAFSLYR QLAHQSNSTN IFFSPVSIAT          AFAMLSLGTK ADTHDEILEG LNFNLTEIPE          AQIHEGFQEL LRTLNPDSQ LQLTTGNGLF          LSEGLKLVDK FLEDVKKLYH SEAFTVNFGD          TEEAKKQIND YVEKGTQGKI VDLVKELDRD          TVFALVNYIF FKGKWERPFE VKDTEEDFH          VDQVTTVKVP MMKRLGMFNI QHCKKLSSWV          LLMKYLG NAT AIFFLPDEGK LQHLENELTH          DIITKFLNE DRRSASLHLP KLSITGTYDL          KSVLGQLGIT KVFSNGADLS GVTEEAPLKL          SKAVHKAVLT IDEKGTEAAG AMFLEAIPMS          IPPEVKFNKP FVFLMIDQNT KSPLFMGKVV NPTQK</p>

技术指标

Our [Abpromise guarantee](#) covers the use of **ab79181** in the following tested applications.

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

应用	SDS-PAGE
纯度	> 90 % SDS-PAGE. ab79181 is purified using conventional chromatography techniques.
形式	Liquid

**稳定性和存储**

Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

Preservative: None

Constituents: 10% Glycerol, 20mM Tris, 2mM EDTA, 1mM DTT, pH 7.5

**常规信息**

**功能**

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 inhibits insulin-induced NO synthesis in platelets, decreases coagulation time and has proteolytic activity against insulin and plasmin.

Short peptide from AAT: reversible chymotrypsin inhibitor. It also inhibits elastase, but not trypsin. Its major physiological function is the protection of the lower respiratory tract against proteolytic destruction by human leukocyte elastase (HLE).

**组织特异性**

Ubiquitous. Expressed in leukocytes and plasma.

**疾病相关**

Alpha-1-antitrypsin deficiency

**序列相似性**

Belongs to the serpin family.

**结构域**

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.

**翻译后修饰**

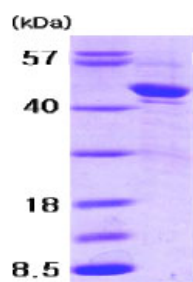
N-glycosylated. Differential glycosylation produces a number of isoforms. N-linked glycan at Asn-107 is alternatively di-antennary, tri-antennary or tetra-antennary. The glycan at Asn-70 is di-antennary with trace amounts of tri-antennary. Glycan at Asn-271 is exclusively di-antennary. Structure of glycans at Asn-70 and Asn-271 is Hex5HexNAc4. The structure of the antennae is Neu5Ac(alpha1-6)Gal(beta1-4)GlcNAc attached to the core structure Man(alpha1-6)[Man(alpha1-3)]Man(beta1-4)GlcNAc(beta1-4)GlcNAc. Some antennae are fucosylated, which forms a Lewis-X determinant.

Proteolytic processing may yield the truncated form that ranges from Asp-30 to Lys-418.

**细胞定位**

Secreted. Endoplasmic reticulum. The S and Z allele are not secreted effectively and accumulate intracellularly in the endoplasmic reticulum and Secreted, extracellular space, extracellular matrix.

**图片**



15% SDS-PAGE showing ab79181 at approximately 44kDa (3 $\mu$ g).

SDS-PAGE - alpha 1 Antitrypsin protein (Human)  
(ab79181)

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <http://www.abcam.cn/abpromise> or contact our technical team.

### Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors