

Product datasheet

Native human alpha 1 Antitrypsin protein (Active) ab91136

[2 References](#) [2 图像](#)

描述

产品名称	Native人alpha 1 Antitrypsin蛋白(Active)
生物活性	When tested with active-site titrated porcine pancreatic trypsin using Na-Benzoyl-L-Arginine-para-Nitroanilide Hydrochloride (L-BAPNA) as substrate, it is 75-100% inhibitory.
纯度	> 95 % SDS-PAGE.
表达系统	Native
Accession	<u>P01009</u>
蛋白长度	Full length protein
无动物成分	No
性质	Native
种属	Human
预测分子量	52 kDa

技术指标

Our **Abpromise guarantee** covers the use of **ab91136** in the following tested applications.

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

应用	Western blot Functional Studies SDS-PAGE
形式	Lyophilized
补充说明	Protein Determination: Extinction Coefficient (E) 0.1% at 280nm, 1cm pathway = 0.433 Prepared from plasma shown to be non reactive for HBsAg, anti-HCV, anti-HBc, and negative for anti-HIV 1 & 2 by FDA approved tests.

制备和贮存

稳定性和存储 Shipped at 4°C. Store at -80°C.

pH: 6.50

Constituents: 0.492% Sodium phosphate, 1.74% Sodium chloride

This product is an active protein and may elicit a biological response in vivo, handle with caution.

复溶

Reconstitute with distilled water. Once reconstituted, ab91136 is stable for one week at 4°C.

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

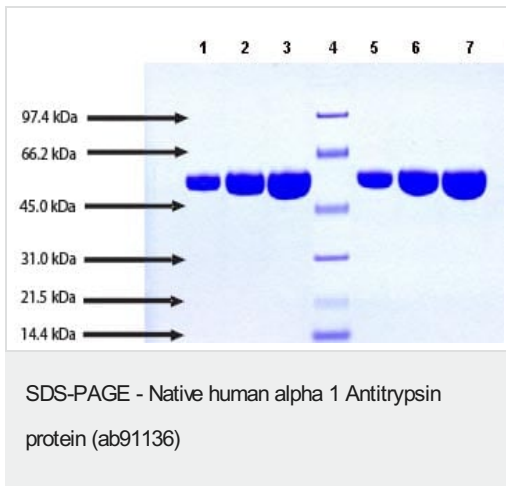
N-glycosylated. Differential glycosylation produces a number of isoforms. N-linked glycan at Asn-107 is alternatively di-antennary, tri-antennary or tetra-antennary. The glycan at Asn-70 is di-antennary with trace amounts of tri-antennary. Glycan at Asn-271 is exclusively di-antennary. Structure of glycans 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

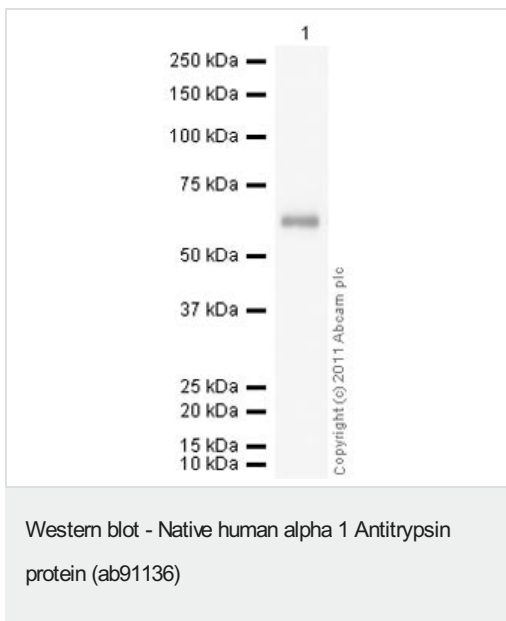
Secreted. Endoplasmic reticulum. The S and Z allele are not secreted effectively and accumulate intracellularly in the endoplasmic reticulum and Secreted, extracellular space, extracellular matrix.

图片



SDS-PAGE: 4-12% Bis-Tris NuPAGE gel

- Lane 1. 5 µg ab91136 (reduced/heated)
- Lane 2. 10 µg ab91136 (reduced/heated)
- Lane 3. 20 µg ab91136 (reduced/heated)
- Lane 4. Molecular weight markers
- Lane 5. 5 µg ab91136 (non-reduced/no heat)
- Lane 6. 10 µg ab91136 (non-reduced/no heat)
- Lane 7. 20 µg ab91136 (non-reduced/no heat)



Anti-alpha 1 Antitrypsin antibody [B9] ([ab9399](#)) at 1 µg/ml + Native human alpha 1 Antitrypsin protein (Active) (ab91136) at 0.1 µg

Secondary

Goat Anti-Mouse IgG H&L (HRP) preadsorbed ([ab97040](#)) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Exposure time: 30 seconds

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

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