

Native human alpha 1 Antitrypsin protein (Active) ab91136

2 References [画像数 2](#)

製品の詳細

製品名	Native human alpha 1 Antitrypsin protein (Active)
生理活性	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.
精製度	> 95 % SDS-PAGE.
発現系	Native
アクセッション番号	<u>P01009</u>
タンパク質長	Full length protein
Animal free	No
由来	Native
生物種	Human
予測される分子量	52 kDa

特性

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.

アプリケーション	Western blot Functional Studies SDS-PAGE
製品の状態	Lyophilized
備考	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.

前処理および保存

保存方法および安定性	Shipped at 4°C. Store at -80°C.
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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.

再構成

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

関連情報

機能

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).

組織特異性

Ubiquitous. Expressed in leukocytes and plasma.

関連疾患

Alpha-1-antitrypsin deficiency

配列類似性

Belongs to the serpin family.

ドメイン

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.

翻訳後修飾

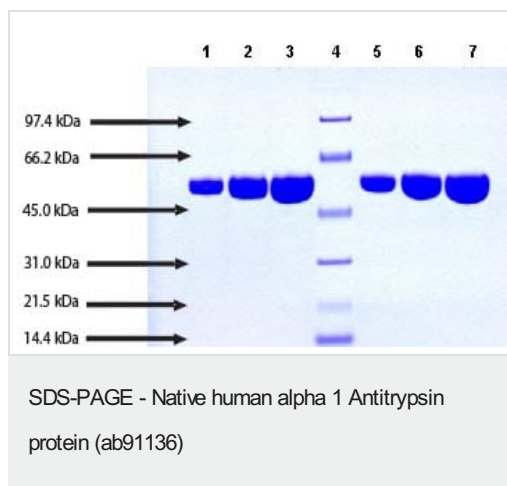
N-glycosylated. Differential glycosylation produces a number of isoforms. N-linked glycan at Asn-107 is alternatively di-antennary, tri-antennary or tetra-antennary. The glycan at Asn-70 is di-antennary with trace amounts of tri-antennary. Glycan at Asn-271 is exclusively di-antennary. Structure of glycans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

細胞内局在

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.

画像



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

Lane 1. 5 µg ab91136 (reduced/heated)

Lane 2. 10 µg ab91136 (reduced/heated)

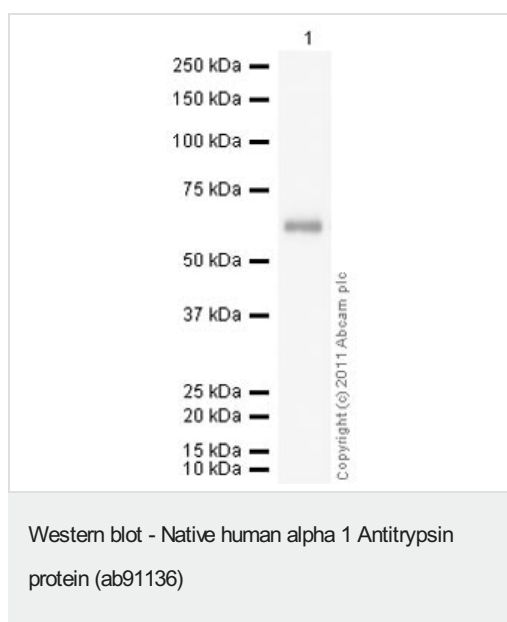
Lane 3. 20 µg ab91136 (reduced/heated)

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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