# abcam

## Product datasheet

## Anti-alpha 1 Antitrypsin antibody [B9] ab9399

2 Abreviews 19 References 画像数 3

製品の概要

製品名 Anti-alpha 1 Antitrypsin antibody [B9]

製品の詳細 Mouse monoclonal [B9] to alpha 1 Antitrypsin

由来種 Mouse

アプリケーション 適用あり: ELISA, WB, IHC-P

種交差性 交差種: Human

免疫原 Full length protein corresponding to Human alpha 1 Antitrypsin.

Database link: P01009

特記事項 This product was changed from ascites to tissue culture supernatant on 28/11/2017. Lot numbers

higher than GR286035-1, GR146648-9 and GR146648-10 will be from tissue culture supernatant.

Please note that the dilutions may need to be adjusted accordingly.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

**バッファー** pH: 7.2

Preservative: 0.1% Sodium azide

精製度 Protein A purified

**ポリ/モノ** モノクローナル

**クローン名** B9

₹**I**□-マ NS0/1

アイソタイプ lgG1

1

## アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab9399の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
ELISA		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration.

## ターゲット情報

#### 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

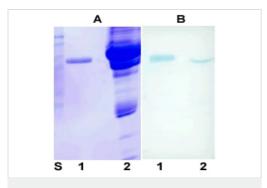
N-glycosylated. Differential glycosylation produces a number of isoforms. N-linked glycan at Asn-107 is alternatively di-antennary, tri-antennary or tetra-antennary. The glycan at Asn-70 is diantennary with trace amounts of tri-antennary. Glycan at Asn-271 is exclusively di-antennary. Structure of glycans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



Western blot - Anti-alpha 1 Antitrypsin antibody [B9] (ab9399)

© Abcam 2008

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-alpha 1 Antitrypsin antibody [B9] (ab9399)

Western blot of alpha 1 antitrypsin using ab9399 at a concentration of  $0.5 \, \mu g/ml$ .

lane 2 - human plasma, 2 µl

lane S - standard proteins.

A - SDS-PAGE, Coomasie staining

B - Western blot with ab9399.

Western blot of alpha 1 antitrypsin using ab9399 at a concentration of  $0.5 \, \mu g/ml$ .

lane 2 - human plasma, 2 µl

lane S - standard proteins.

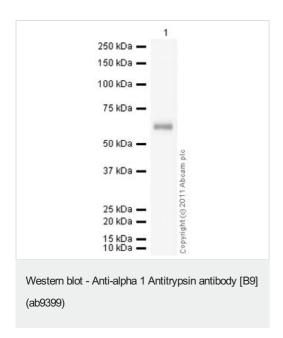
A - SDS-PAGE, Coomasie staining

B - Western blot with ab9399.

Ab9399 staining human normal liver. Staining is localized to the cytoplasm.

Left panel: with primary antibody at 1 ug/ml. Right panel: isotype control.

Sections were stained using an automated system DAKO Autostainer Plus, at room temperature. Sections were rehydrated and antigen retrieved with the Dako 3-in-1 AR buffer, EDTA pH 9.0 in a DAKO PT Link. Slides were peroxidase blocked in 3% H2O2 in methanol for 10 minutes. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 minutes and detected with Dako Envision Flex amplification kit for 30 minutes. Colorimetric detection was completed with Diaminobenzidine for 5 minutes. Slides were counterstained with Haematoxylin and coverslipped under DePeX. Please note that for manual staining we recommend to optimize the primary antibody concentration and incubation time (overnight incubation), and amplification may be required.



Anti-alpha 1 Antitrypsin antibody [B9] (ab9399) at 1  $\mu$ g/ml + Native human alpha 1 Antitrypsin protein (Active) (**ab91136**) at 0.1  $\mu$ g

#### 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"

## 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 <a href="https://www.abcam.co.jp/abpromise">https://www.abcam.co.jp/abpromise</a> or contact our technical team.

#### Terms and conditions

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