abcam

Product datasheet

Anti-alpha 1 Antitrypsin antibody [EPR9090] ab166610



重组 RabMAb

★★★★★ 1 Abreviews 3 References 3 图像

概述

产品名称 Anti-alpha 1 Antitrypsin抗体[EPR9090]

描述 兔单克隆抗体[EPR9090] to alpha 1 Antitrypsin

宿主 Rabbit

经测试应用 适用于: WB. ICC/IF

不适用于: IHC-P or IP

种属反应性 与反应: Human

预测可用于: Mouse, Rat 🗥

免疫原 Recombinant fragment corresponding to Human alpha 1 Antitrypsin.

阳性对照 WB: Human serum and fetal liver lysates. ICC/IF: HepG2 cells.

常规说明 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

性能

形式 Liquid

存放说明 Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

存储溶液 pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA

纯度 Protein A purified

克隆 单克隆 克隆编号 **EPR9090**

同种型 lgG

The Abpromise guarantee

Abpromise™承诺保证使用ab166610于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	******* <u>(1)</u>	1/1000 - 1/10000. Detects a band of approximately 52 kDa (predicted molecular weight: 46 kDa).
ICC/IF		1/100.

应用说明

Is unsuitable for IHC-P or IP.

靶标

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 Belongs to the serpin family.

序列相似性

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 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-

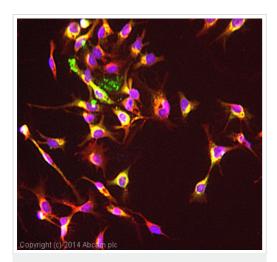
X determinant.

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

细胞定位

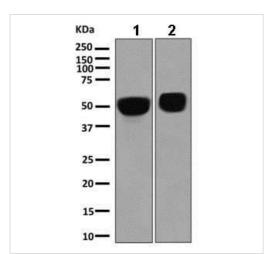
Secreted. Endoplasmic reticulum. The S and Z allele are not secreted effectively and accumulate intracellularly in the endoplasmic reticulum and Secreted, extracellular space, extracellular matrix.

图片



Immunocytochemistry/ Immunofluorescence - Antialpha 1 Antitrypsin antibody [EPR9090] (ab166610)

ab166610 stained HepG2 cells. The cells were 100% methanol fixed for 5 minutes at -20°C and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1hour at room temperature to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab166610 at 1/100 dilution) overnight at +4°C. The secondary antibody (pseudo-colored green) was Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) preadsorbed (ab150081) used at a 1/1000 dilution for 1hour at room temperature. Alexa Fluor® 594 WGA was used to label plasma membranes (pseudo-colored red) at a 1/200 dilution for 1hour at room temperature. DAPI was used to stain the cell nuclei (pseudo-colored blue) at a concentration of 1.43 μ M for 1hour at room temperature.



Western blot - Anti-alpha 1 Antitrypsin antibody [EPR9090] (ab166610)

All lanes : Anti-alpha 1 Antitrypsin antibody [EPR9090] (ab166610) at 1/1000 dilution

Lane 1 : Human serum lysate
Lane 2 : Fetal liver lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes: HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 46 kDa Observed band size: 52 kDa



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