abcam

Product datasheet

Anti-AACT antibody ab9374

1 References 4 Images

Overview

Product name	Anti-AACT antibody
Description	Rabbit polyclonal to AACT
Host species	Rabbit
Tested applications	**Suitable for:** IHC-P, Sandwich ELISA, WB
Species reactivity	**Reacts with:** Human **Predicted to work with:** Mammals **Does not react with:** Mouse
Immunogen	Full length native protein (purified) corresponding to AACT. Alpha-1-antichymotrypsin isolated from human serum.
General notes	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

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.3 Constituents: PBS, 0.01425% Magnesium chloride, 0.00154% (R*,R*)-1,4-Dimercaptobutan-2,3-diol, 0.01% BSA
Purity	Protein A purified
Clonality	Polyclonal
Isotype	IgG
Light chain type	unknown

Applications

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The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab9374 in the following tested applications.

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

Application	Abreviews	Notes
IHC-P		1/25 - 1/50. ABC method.
Sandwich ELISA		Use at an assay dependent concentration. For sandwich ELISA, use this antibody as Detection at an assay dependent concentration with Mouse monoclonal to AACT (**ab54693**) as Capture.
WB		Use at an assay dependent concentration. Detects a band of approximately 70 kDa (predicted molecular weight: 48 kDa). Assay Dependent

Target

Function Although its physiological function is unclear, it can inhibit neutrophil cathepsin G and mast cell chymase, both of which can convert angiotensin-1 to the active angiotensin-2.

Tissue specificity Plasma. Synthesized in the liver. Like the related alpha-1-antitrypsin, its concentration increases in the acute phase of inflammation or infection. Found in the amyloid plaques from the hippocampus of Alzheimer disease brains.

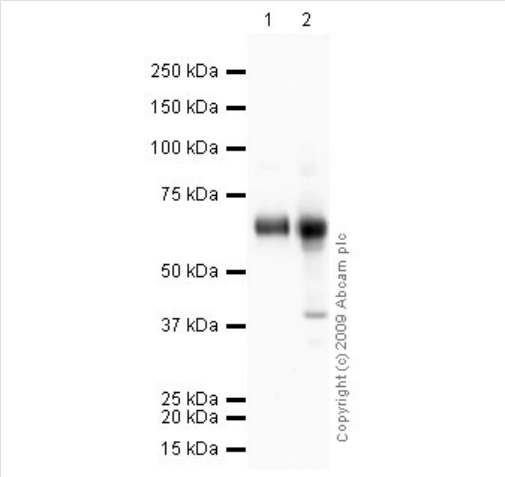
Involvement in disease Defects in SERPINA3 may be a cause of chronic obstructive pulmonary disease (COPD) [MIM:107280].

Sequence similarities Belongs to the serpin family.

Domain 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.

Cellular localization Secreted.

Images



Western blot - Anti-AACT antibody (ab9374)

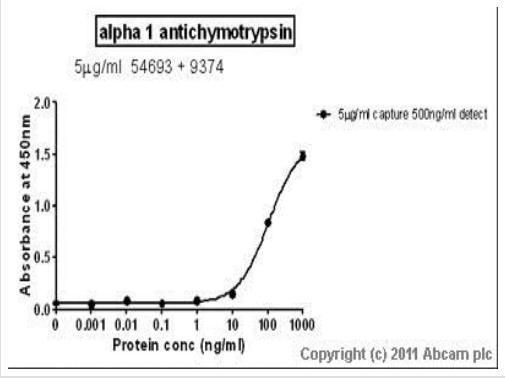
All lanes : Anti-AACT antibody (ab9374) at 1 µg/ml

Lane 1 : Human spinal cord tissue lysate - total protein (**ab29188**)
Lane 2 : Human colon tissue lysate - total protein (**ab30051**)

Lysates/proteins at 10 µg per lane.

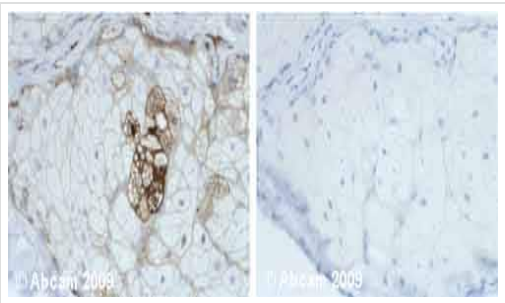
Secondary
All lanes : Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Predicted band size: 48 kDa
Observed band size: 70 kDa



Sandwich ELISA - Anti-AACT antibody (ab9374)

Standard Curve for AACT (Analyte: **AACT protein (Human) (ab80517)**); dilution range 1pg/ml to 1µg/ml using Capture Antibody **Mouse monoclonal to AACT (ab54693)** at 5µg/ml and Detector Antibody **Rabbit polyclonal to AACT (ab9374)** at 0.5µg/ml.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AACT antibody (ab9374)

Human normal skin. Staining is mainly membrane-bound and cytoplasmic. Left panel: with primary antibody at 2 ug/ml. Right panel: negative 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 buffers citrate EDTA pH 9.0 in a DAKO PT Link. Slides were peroxidase blocked in 3% H2O2 in methanol for 10 mins. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 min and detected with Dako envision flex amplification kit for rabbit 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.

Western blot - Anti-AACT antibody (ab9374)

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