abcam

Product datasheet

Anti-ELMO1 antibody ab2239

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Overview

Product name	Anti-ELMO1 antibody
Description	Goat polyclonal to ELMO1
Host species	Goat
Specificity	This antibody is expected to recognise both human isoforms.
Tested applications	**Suitable for:** ICC/IF, IHC-P, WB, IP
Species reactivity	**Reacts with:** Mouse, Rat, Cow, Human, Zebrafish **Predicted to work with:** Dog
Immunogen	Synthetic peptide: PKEPSNYDFVYDCN , corresponding to C terminal amino acids 714-727 of Human ELMO1. Run BLAST with Run BLAST with
Positive control	Jurkat cell lysate.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	Preservative: 0.02% Sodium Azide Constituents: 0.5% BSA, Tris buffered saline, pH 7.3
Purity	Immunogen affinity purified
Purification notes	Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.
Clonality	Polyclonal
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab2239** 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
ICC/IF		Use at an assay dependent concentration. PubMed: 18662984
IHC-P		Use a concentration of 10 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB	★★★★★	Use a concentration of 0.1 - 0.3 µg/ml. Can be blocked with Human ELMO1 peptide (ab22878). Note the smaller isoform of this protein has a consensus glycosylation site, which may explain the higher than expected band size (50 kDa versus 30 kDa).
IP	★★★★★	Use at an assay dependent concentration.

Target

Function

Involved in cytoskeletal rearrangements required for phagocytosis of apoptotic cells and cell motility. Acts in assocation with DOCK1 and CRK. Was initially proposed to be required in complex with DOCK1 to activate Rac Rho small GTPases. May enhance the guanine nucleotide exchange factor (GEF) activity of DOCK1.

Tissue specificity

Widely expressed, with a higher expression in the spleen and placenta.

Sequence similarities

Contains 1 ELMO domain.
Contains 1 PH domain.

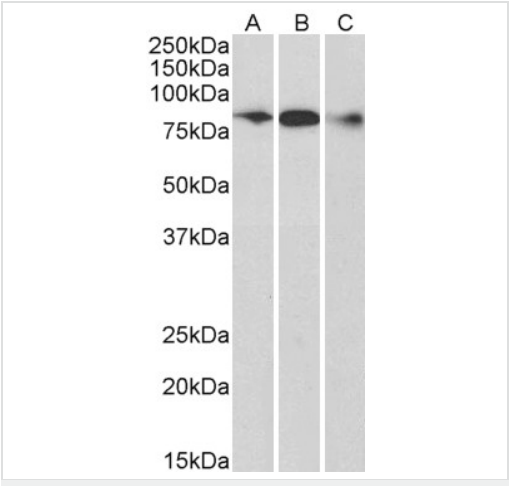
Post-translational modifications

Phosphorylated by HCK.

Cellular localization

Cytoplasm. Cell membrane. Translocation to plasma membrane seems to be mediated by DOCK1 and CRK.

Images

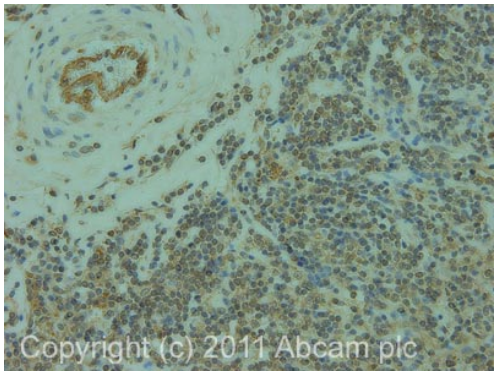


Western blot - Anti-ELMO1 antibody (ab2239)

All lanes : Anti-ELMO1 antibody (ab2239) at 0.3 µg/ml

Lane 1 : Human Frontal Cortex cell lysate (35µg protein in RIPA buffer).
Lane 2 : Mouse cell lysate (35µg protein in RIPA buffer).
Lane 3 : Rat cell lysate (35µg protein in RIPA buffer).

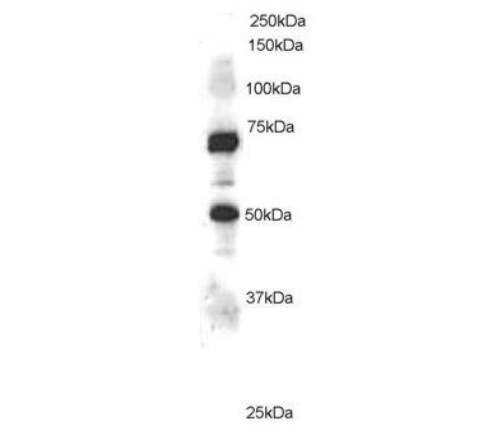
Primary incubation was 1 hour. Detected by chemiluminescence.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ELMO1 antibody (ab2239)

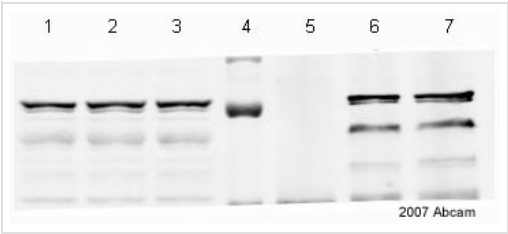
IHC image of ab2239 staining in human normal lymphoid formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol B. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab2239, 10µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Western blot - Anti-ELMO1 antibody (ab2239)

Ab2239 staining (1µg/ml) of Jurkat lysate (RIPA buffer, 35µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence. Ab2239 staining (1µg/ml) of Jurkat lysate (RIPA buffer, 35µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.



Immunoprecipitation - Anti-ELMO1 antibody (ab2239)

This image is courtesy of an anonymous Abreview

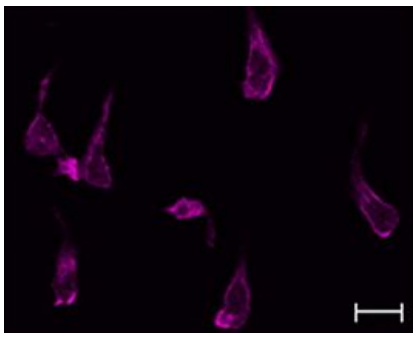
Lane 1-3: whole cell lysate (differentiated HL60 cells)

Lane 4: Protein molculare standard (100, 75 and 50kDa)

Lane 5: Immunoprecipitation with normal IgG (mock)

Lane 6 and 7: Immunoprecipitation with ab2239 antibody

Immunoprecipiated with ab2239 1.5 ug/sample (about 400 ug total protein). Immunoblotted with polyclonal rabbit anti-Dock2 or ab2239 antibody.



Immunocytochemistry/ Immunofluorescence - Anti-ELMO1 antibody (ab2239)

Image from Sai Jiqing et. al. J. Biol. Chem., Sep 2008; 283: 26538 - 26547 (Fig 4A).

ab2239 staining ELMO1 in human HL60 cells by Immunocytochemistry/ Immunofluoresecence. Cells were fixed in 4% paraformaldehyde for 10 minutes, permeabilized in 0.2% Triton X-100 in PBS for 5 minutes, blocked in 10% normal donkey serum for 30 minutes and incubated with primary antibodies for 2 hours at room temperature. After washing three times with 0.1% Tween 20 in PBS, the coverslips were incubated with fluorescence-conjugated secondary antibodies for 1 hour.

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