abcam

Product datasheet

Anti-PIM1 antibody [EPR24447-39] ab300453

Recombinant RabMAb

5 Images

Overview

Product name Anti-PIM1 antibody [EPR24447-39]

Description Rabbit monoclonal [EPR24447-39] to PIM1

Host species Rabbit

Tested applications Suitable for: IP, WB

Unsuitable for: Flow Cyt (Intra) or IHC-P

Species reactivity Reacts with: Mouse, Human

Does not react with: Rat

Recombinant fragment. This information is proprietary to Abcam and/or its suppliers. **Immunogen**

Positive control WB: K-562, K-562 transfected with siRNA specifically targeti PIM1, whole, K-562, A20, F9, His-

tagged human PIM1 recombinant protein and His-tagged human PIM3 recombinant protein

lysates. IP: A20 cell.

General notes 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**.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified

Clonality Monoclonal

Clone number EPR24447-39

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab300453 in the following tested applications.

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

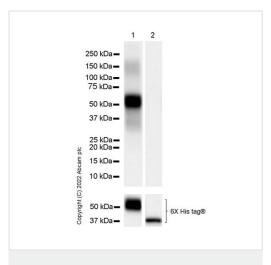
Application	Abreviews	Notes
IP		1/30. Tested in mouse samples only
WB		1/1000. Detects a band of approximately 34, 44 kDa.

Application notes Is unsuitable for Flow Cyt (Intra) or IHC-P.

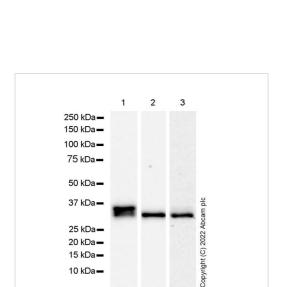
Target

Function	May affect the structure or silencing of chromatin by phosphorylating HP1 gamma/CBX3. Isoform 2 promotes the G1/S transition of the cell cycle via up-regulation of CDK2 activity and phosphorylation of CDKN1B, resulting in enhanced nuclear export and proteasome-dependent degradation of CDKN1B. Isoform 2 also represses CDKN1B transcription by phosphorylating and inactivating the transcription factor FOXO3. Plays a role in signal transduction in blood cells. Contributes to both cell proliferation and survival and thus provides a selective advantage in tumorigenesis.
Tissue specificity	Expressed primarily in cells of the hematopoietic and germline lineages. Isoform 1 and isoform 2 are both expressed in prostate cancer cell lines.
Sequence similarities	Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. PIM subfamily. Contains 1 protein kinase domain.
Post-translational modifications	Autophosphorylated on both serine/threonine and tyrosine residues.
Cellular localization	Cytoplasm. Nucleus and Cell membrane.

Images



Western blot - Anti-PIM1 antibody [EPR24447-39] (AB300453)



Western blot - Anti-PIM1 antibody [EPR24447-39] (AB300453)

All lanes : Anti-PIM1 antibody [EPR24447-39] (ab300453) at 1/5000 dilution

Lane 1 : His-tagged human PIM1 recombinant protein

Lane 2: His-tagged human PIM3 recombinant protein

Lysates/proteins at 0.01 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

Observed band size: 34,44 kDa

Exposure time: 7 seconds

All lanes : Anti-PIM1 antibody [EPR24447-39] (ab300453) at 1/1000 dilution

Lane 1 : K-562 (human chronic myelogenous leukemia lymphoblast), whole cell lysate

Lane 2 : A20 (Mouse reticulum sarcoma B lymphocyte), whole cell lysate

Lane 3: F9 (mouse embryonal carcinoma epithelial cell), whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit $\lg G \ H\&L \ (HRP) \ (\underline{ab97051})$ at 1/100000 dilution

Observed band size: 34 kDa

Blocking / Diluting buffer and concentration:5% NFDM/TBST

Exposure time:

Lane 1, 2: 70 seconds

Lane 3: 3 minutes

1 2
250 kDa —
150 kDa —
150 kDa —
100 kDa —
75 kDa —
50 kDa —
37 kDa —
25 kDa —
20 kDa —
215 kDa —
215 kDa —
216 kDa —
216 kDa —
217 kDa —
218 kDa —
219 kDa —
210 kDa

Western blot - Anti-PIM1 antibody [EPR24447-39] (AB300453)

All lanes : Anti-PIM1 antibody [EPR24447-39] (ab300453) at 1/1000 dilution

Lane 1 : K-562 (human chronic myelogenous leukemia lymphoblast) transfected with scrambled siRNA control, whole cell lysate

 $\textbf{Lane 2:} \ \text{K-}562 \ transfected with siRNA specifically targeting PIM1,} \\ \text{whole cell lysate}$

Lysates/proteins at 20 µg per lane.

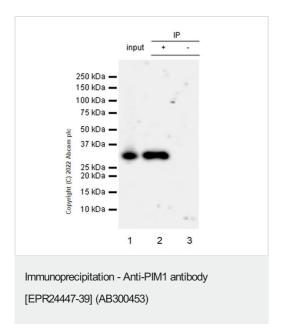
Secondary

All lanes : Goat Anti-Rabbit $\lg G \ H\&L \ (HRP) \ (\underline{ab97051})$ at 1/100000 dilution

Observed band size: 34 kDa

Exposure time: 37 seconds

Blocking / Diluting buffer and concentration:5% NFDM/TBST



PIM1 was immunoprecipitated from 0.35 mg A20 (mouse reticulum sarcoma B lymphocyte), whole cell lysate 10 ug with ab300453 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab300453 at ID63 dilution. VeriBlot for IP secondary antibody (HRP)(ab131366) was used at 1/5000 dilution.

Lane 1: A20 (mouse reticulum sarcoma B lymphocyte), whole cell lysate 10 ug

Lane 2: ab300453 IP in A20 whole cell lysate

Lane 3: Rabbit monoclonal $\lg G (\underline{ab172730})$ instead of ab300453 in A20 whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 3 minutes



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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