

Product datasheet

Anti-ZIP Kinase antibody [EPR1636Y] ab51602

KO VALIDATED Recombinant RabMAb

[1 Abreviews](#) [3 References](#) [2 Images](#)

Overview

Product name	Anti-ZIP Kinase antibody [EPR1636Y]
Description	Rabbit monoclonal [EPR1636Y] to ZIP Kinase
Host species	Rabbit
Specificity	ab51602 recognizes ZIP Kinase.
Tested applications	Suitable for: WB, Flow Cyt Unsuitable for: ICC/IF or IP
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide corresponding to Human ZIP Kinase aa 400 to the C-terminus (C terminal). Database link: O43293
Positive control	HeLa cell lysate.
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](#).

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise[™] guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

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, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	EPR1636Y
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab51602** 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
WB		1/1000. Detects a band of approximately 53 kDa (predicted molecular weight: 53 kDa).
Flow Cyt		1/10. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Application notes Is unsuitable for ICC/IF or IP.

Target

Function Serine/threonine kinase which acts as a positive regulator of apoptosis. Phosphorylates histone H3 on 'Thr-11' at centromeres during mitosis. Regulates myosin light chain phosphatase through phosphorylation of MYPT1 thereby regulating the assembly of the actin cytoskeleton, cell migration, invasiveness of tumor cells, smooth muscle contraction and neurite outgrowth. Involved in the formation of promyelocytic leukemia protein nuclear body (PML-NB), one of many subnuclear domains in the eukaryotic cell nucleus, and which is involved in oncogenesis and viral infection.

Sequence similarities

Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. DAP kinase subfamily.

Contains 1 protein kinase domain.

Post-translational modifications

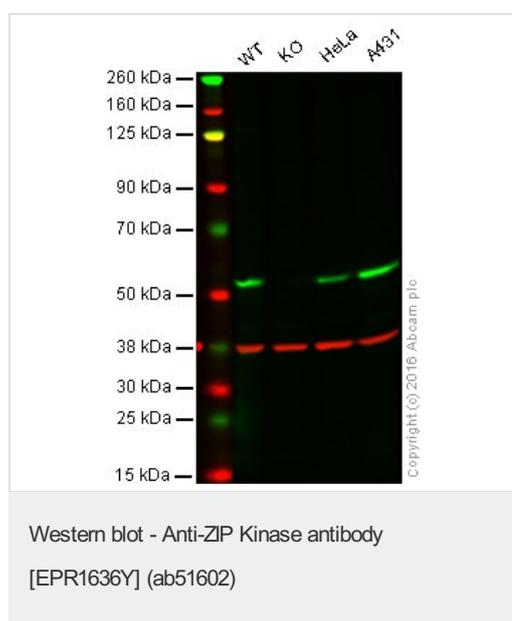
Ubiquitinated. Ubiquitination mediated by the UBE2D3 E3 ligase does not lead to proteasomal degradation, but influences promyelocytic leukemia protein nuclear bodies (PML-NBs) formation in the nucleus.

Autophosphorylated. Phosphorylated by ROCK1.

Cellular localization

Nucleus. Cytoplasm. Nucleus > PML body. Relocates to the cytoplasm on binding PAWR where the complex appears to interact with actin filaments (By similarity). Localizes to promyelocytic leukemia protein nuclear bodies (PML-NBs). Associates to centromeres from prophase to anaphase.

Images



Lane 1: Wild-type HAP1 whole cell lysate (20 µg)

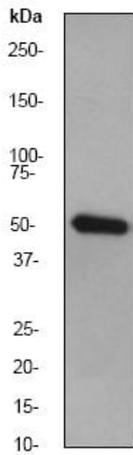
Lane 2: ZIP Kinase knockout HAP1 whole cell lysate (20 µg)

Lane 3: HeLa whole cell lysate (20 µg)

Lane 4: A431 whole cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab51602 observed at 53 kDa. Red - loading control, [ab8245](#), observed at 37 kDa.

ab51602 was shown to specifically react with ZIP Kinase in wild-type HAP1 cells. No band was observed when ZIP Kinase knockout samples were examined. Wild-type and ZIP Kinase knockout samples were subjected to SDS-PAGE. Ab51602 and [ab8245](#) (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/10,000 dilution respectively. Blots were developed with 800CW Goat anti Rabbit and 680CW Goat anti Mouse secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-ZIP Kinase antibody
[EPR1636Y] (ab51602)

Anti-ZIP Kinase antibody [EPR1636Y] (ab51602) at 1/1000 dilution
+ HeLa cell lysate at 10 μ g

Secondary

Goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 53 kDa

Observed band size: 53 kDa

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

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- Response to your inquiry within 24 hours

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