

Product datasheet

Anti-HIPK2 antibody [EPR3819] **ab108543**

Recombinant **RabMAb**

[6 References](#) [4 Images](#)

Overview

Product name	Anti-HIPK2 antibody [EPR3819]
Description	Rabbit monoclonal [EPR3819] to HIPK2
Host species	Rabbit
Specificity	The immunogen used for this product shares 69% homology and 6 consecutive amino acids with HIPK1. Cross-reactivity with this protein has not been confirmed experimentally.
Tested applications	Suitable for: Flow Cyt (Intra), WB Unsuitable for: IHC-P
Species reactivity	Reacts with: Mouse, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	HT-1080 and HepG2 whole cell lysate (ab7900)
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	<p>pH: 7.20</p> <p>Preservative: 0.05% Sodium azide</p> <p>Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant</p>

Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR3819
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab108543 in the following tested applications.

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

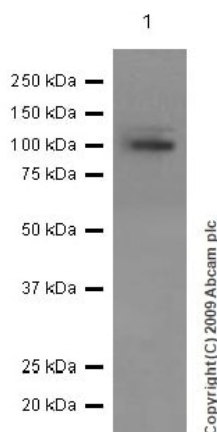
Application	Abreviews	Notes
Flow Cyt (Intra)		1/1000 - 1/10000. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/2000 - 1/10000. Detects a band of approximately 100, 130 kDa (predicted molecular weight: 131 kDa).

Application notes Is unsuitable for IHC-P.

Target

Function	Protein kinase acting as a corepressor of several transcription factors, including SMAD1 and POU4F1/Bm3a and probably NK homeodomain transcription factors. Inhibits cell growth and promotes apoptosis. Involved in transcriptional activation of TP53 and TP73. Phosphorylation of TP53 may be mediated by a TP53-HIPK2-AXIN1 complex. In response to TGFB, cooperates with DAXX to activate JNK. Phosphorylates the antiapoptotic factor CTBP1 and promotes its proteasomal degradation. In the Wnt/beta-catenin signaling pathway acts as an intermediate kinase between TAK1 and NLK to promote the proteasomal degradation of MYB (By similarity). Phosphorylates CBX4 upon DNA damage and promotes its E3 SUMO-protein ligase activity. PML, HIPK2 and FBXO3 may act synergically to activate p53/TP53-dependent transactivation.
Tissue specificity	Highly expressed in heart, muscle and kidney. Weakly expressed in a ubiquitous way. Down-regulated in several thyroid and breast tumors.
Sequence similarities	Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. HIPK subfamily. Contains 1 protein kinase domain.
Post-translational modifications	Phosphorylated on tyrosines (By similarity). Autophosphorylated. Sumoylated. When conjugated it is directed to nuclear speckles. Desumoylated by SENP1 (By similarity). Sumoylation on Lys-32 is promoted by the E3 SUMO-protein ligase CBX4. Ubiquitinated by FBXO3, leading to rapid proteasome-dependent degradation. This degradation, but not ubiquitination, is prevented in the presence of PML.
Cellular localization	Nucleus > PML body. Cytoplasm. Concentrated in PML/POD/ND10 nuclear bodies. Small amounts are cytoplasmic.

Images



Western blot - Anti-HIPK2 antibody [EPR3819]
(ab108543)

Anti-HIPK2 antibody [EPR3819] (ab108543) at 1/2000 dilution +
Mouse heart tissue lysate at 20 µg

Secondary

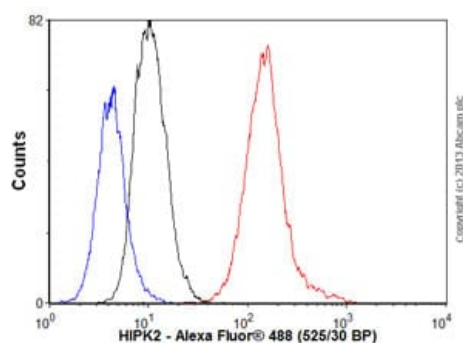
Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/10000 dilution

Predicted band size: 131 kDa

Observed band size: 100,130 kDa

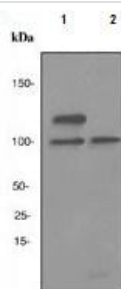
Exposure time: 180 seconds

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



Flow Cytometry (Intracellular) - Anti-HIPK2 antibody
[EPR3819] (ab108543)

Overlay histogram showing HEK293 cells stained with ab108543 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab108543, 1/10000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H&L) ([ab150077](#)) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1µg/1x10⁶ cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. This antibody gave a positive signal in HEK293 cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.



Western blot - Anti-HIPK2 antibody [EPR3819]
(ab108543)

All lanes : Anti-HIPK2 antibody [EPR3819] (ab108543) at 1/2000 dilution

Lane 1 : HT-1080 cell lysate

Lane 2 : HepG2 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary





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

Predicted band size: 131 kDa

Observed band size: 130 kDa

Additional bands at: 100 kDa (possible isoform)

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-HIPK2 antibody [EPR3819] (ab108543)

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

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