

Product datasheet

Anti-IKK alpha (phospho T23) antibody ab38515

★★★★★ [2 Abreviews](#) [38 References](#) [3 Images](#)

Overview

Product name	Anti-IKK alpha (phospho T23) antibody
Description	Rabbit polyclonal to IKK alpha (phospho T23)
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, WB, IHC-P
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide corresponding to Human IKK alpha aa 1-100 (phospho T23). Database link: O15111
General notes	<p>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.</p> <p>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</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 50% Glycerol, 0.87% Sodium chloride, PBS
Purity	Immunogen affinity purified
Purification notes	The antibody was affinity purified from rabbit antiserum by affinity chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab38515 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 a concentration of 1 µg/ml.
WB	★☆☆☆☆ (1)	1/500 - 1/1000. Detects a band of approximately 85 kDa (predicted molecular weight: 85 kDa).
IHC-P		Use at an assay dependent concentration.

Target

Function

Acts as part of the IKK complex in the conventional pathway of NF-kappa-B activation and phosphorylates inhibitors of NF-kappa-B thus leading to the dissociation of the inhibitor/NF-kappa-B complex and ultimately the degradation of the inhibitor. As part of the non-canonical pathway of NF-kappa-B activation, the MAP3K14-activated CHUK/IKKA homodimer phosphorylates NFkB2/p100 associated with RelB, inducing its proteolytic processing to NFkB2/p52 and the formation of NF-kappa-B RelB-p52 complexes. Also phosphorylates NCOA3. Phosphorylates 'Ser-10' of histone H3 at NF-kappa-B-regulated promoters during inflammatory responses triggered by cytokines.

Tissue specificity

Widely expressed.

Involvement in disease

Defects in CHUK are the cause of cocoon syndrome (COCOS) [MIM:613630]; also known as fetal encasement syndrome. COCOS is a lethal syndrome characterized by multiple fetal malformations including defective face and seemingly absent limbs, which are bound to the trunk and encased under the skin.

Sequence similarities

Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. I-kappa-B kinase subfamily.
Contains 1 protein kinase domain.

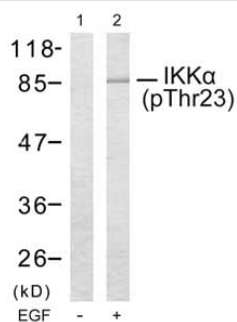
Post-translational modifications

Phosphorylated by MAP3K14/NIK, AKT and to a lesser extent by MEKK1, and dephosphorylated by PP2A. Autophosphorylated.
Acetylation of Thr-179 by Yersinia yopJ prevents phosphorylation and activation, thus blocking the I-kappa-B signaling pathway.

Cellular localization

Cytoplasm. Nucleus. Shuttles between the cytoplasm and the nucleus.

Images



Western blot - Anti-IKK alpha (phospho T23)
antibody (ab38515)

All lanes : Anti-IKK alpha (phospho T23) antibody (ab38515) at 1/500 dilution

Lane 1 : MDA-MB-435 cell extract.

Lane 2 : MDA-MB-435 cell extract + EGF (The cells were treated with 200ng/ml EGF for 5 minutes).

Lysates/proteins at 30 µg per lane.

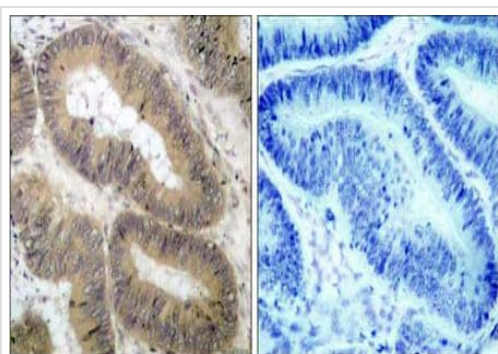
Secondary

All lanes : Alkaline Phosphatase AffiniPure Goat Anti-Rabbit IgG (H+L)

Predicted band size: 85 kDa

Observed band size: 85 kDa

Lanes can be loaded with 5-30µg of total protein.

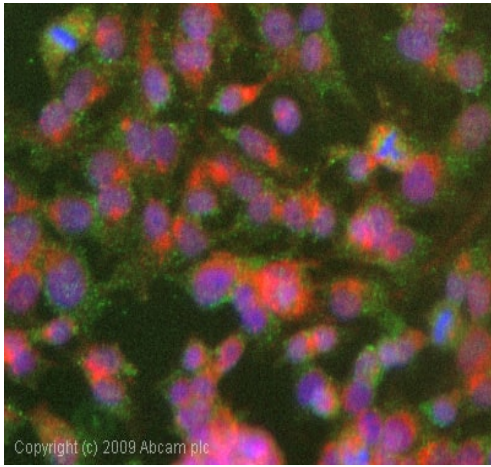


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IKK alpha (phospho T23)
antibody (ab38515)

ab38515 at a 1:50 dilution staining IKK alpha in Human colon carcinoma tissue using Immunohistochemistry, Paraffin Embedded Tissue.

Left image : untreated.

Right image : treated with phosphopeptide.



Immunocytochemistry/ Immunofluorescence - Anti-IKK alpha (phospho T23) antibody (ab38515)

ICC/IF image of ab38515 stained HepG2 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab38515, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

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