abcam

Product datasheet

Anti- IKK beta antibody [EPR16628] - BSA and Azide free ab240210



4 Images

Overview

Product name Anti- IKK beta antibody [EPR16628] - BSA and Azide free

Description Rabbit monoclonal [EPR16628] to IKK beta - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: WB, IP

Unsuitable for: Flow Cyt (Intra) or ICC/IF

Species reactivity Reacts with: Mouse, Rat, Human

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

General notes ab240210 is the carrier-free version of ab178870.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for

increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

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. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

ClonalityMonoclonalClone numberEPR16628

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab240210 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		Use at an assay dependent concentration. Detects a band of approximately 75, 87 kDa (predicted molecular weight: 85, 87 kDa).
IP		Use at an assay dependent concentration.

Application notes Is unsuitable for Flow Cyt (Intra) or ICC/IF.

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. Also phosphorylates NCOA3.

Tissue specificity Highly expressed in heart, placenta, skeletal muscle, kidney, pancreas, spleen, thymus, prostate,

testis and peripheral blood.

Sequence similaritiesBelongs to the protein kinase superfamily. Ser/Thr protein kinase family. I-kappa-B kinase

subfamily.

Contains 1 protein kinase domain.

Post-translational modifications

Upon cytokine stimulation, phosphorylated on Ser-177 and Ser-181 by MEKK1 and/or

MAP3K14/NIK; which enhances activity. Once activated, autophosphorylates on the C-terminal serine cluster; which decreases activity and prevents prolonged activation of the inflammatory

response.

Acetylation of Thr-180 by Yersinia yopJ prevents phosphorylation and activation, thus blocking the

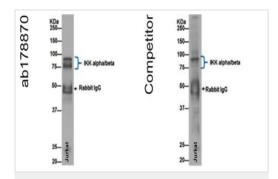
I-kappa-B pathway.

Ubiquitinated. Monoubiquitination involves TRIM21 that leads to inhibition of Tax-induced NF-

kappa-B signaling. According to PubMed:19675099, 'Ser-163' does not serve as a

monoubiquitination site. According to PubMed:16267042, ubiquitination on 'Ser-163' modulates phosphorylation on C-terminal serine residues. Monoubiquitination by TRIM21 is dirupted by

Images



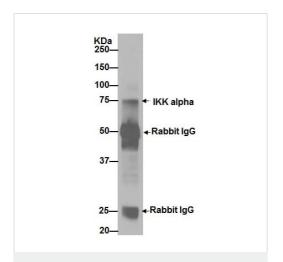
Immunoprecipitation - Anti- IKK beta antibody [EPR16628] - BSA and Azide free (ab240210) This immunoprecipation image is a comparison between **ab178870** and a competitor's leading rabbit polyclonal antibody.

Immunoprecipitation of Jurkat (Human T cell leukemia cells from peripheral blood) whole cell extracts using **ab178870** at 1/40 dilution. Western blot detection was performed using **ab178870** at 1/1000 dilution followed by Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated secondary antibody at 1/1000 dilution. The blocking and diluting buffer was 5% NFDM/TBST.

Immunoprecipitation of Jurkat (Human T cell leukemia cells from peripheral blood) whole cell extracts using competitor's Anti-IKK alpha + IKK beta rabbit polyclonal antibody at 1/12 dilution. Western blot detection was performed using competitor antibody at 1/100 dilution followed by Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated secondary antibody at 1/100 dilution. The blocking and diluting buffer was 5% NFDM/TBST.

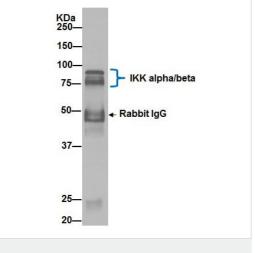
<u>ab178870</u> could recognize 3 isoforms of IKK beta with the MWs of 87kDa, 86kDa and 80kDa, respectively. It could also recognize IKK alpha.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab178870).



Immunoprecipitation - Anti- IKK beta antibody [EPR16628] - BSA and Azide free (ab240210) Cross-Immunoprecipitation of Jurkat (Human T cell leukemia cells from peripheral blood) whole cell extracts using **ab178870** at 1/40 dilution. Western blot detection was performed using **ab32041** (IKK alpha) at 1/1000 dilution followed by Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated secondary antibody at 1/1000 dilution. The blocking and diluting buffer was 5% NFDM/TBST.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab178870</u>).

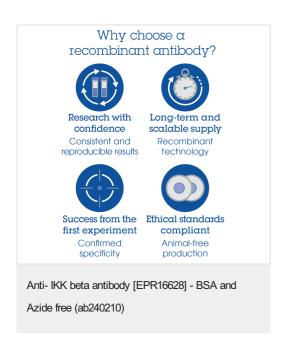


Immunoprecipitation - Anti- IKK beta antibody [EPR16628] - BSA and Azide free (ab240210)

Immunoprecipitation of Jurkat (Human T cell leukemia cells from peripheral blood) whole cell extracts using **ab178870** at 1/40 dilution. Western blot detection was performed using **ab178870** at 1/1000 dilution followed by Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated secondary antibody at 1/1000 dilution. The blocking and diluting buffer was 5% NFDM/TBST.

ab178870 could recognize 3 isoforms of IKK beta with the MWs of 87kDa, 86kDa and 80kDa, respectively. It could also recognize IKK alpha.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab178870</u>).



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