


## Product datasheet

### HRP Anti-IKK beta antibody [Y466] ab194713

KO VALIDATED Recombinant RabMAb

3 Images

#### Overview

Product name	HRP Anti-IKK beta antibody [Y466]
Description	HRP Rabbit monoclonal [Y466] to IKK beta
Host species	Rabbit
Conjugation	HRP
Tested applications	<b>Suitable for:</b> WB
Species reactivity	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Daudi cell lysate and human cervical carcinoma. IHC-P: FFPE human breast adenocarcinoma.
General notes	Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a> .

#### 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. Avoid freeze / thaw cycle. Store In the Dark.
Storage buffer	pH: 7.40 Preservative: 0.1% Proclin 300 Solution Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	Y466
Isotype	IgG

#### Applications

## The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab194713 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		1/5000. Detects a band of approximately 87 kDa (predicted molecular weight: 87 kDa).

## 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 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

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 disrupted by Yersinia yopJ.

### Cellular localization

Cytoplasm. Membrane raft. Colocalized with DPP4 in membrane rafts.

## Images



Western blot - HRP Anti-IKK beta antibody [Y466]  
(ab194713)

**All lanes :** HRP Anti-IKK beta antibody [Y466] (ab194713) at  
1/5000 dilution

**Lane 1 :** Wild-type HAP1 whole cell lysate

**Lane 2 :** IKKBK (IKK beta) knockout HAP1 whole cell lysate

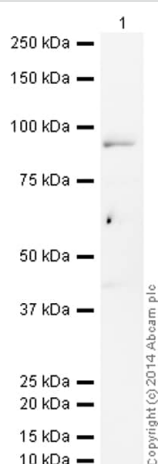
Lysates/proteins at 1/20 dilution per lane.

**Predicted band size:** 87 kDa

**Observed band size:** 87 kDa

**Exposure time:** 20 minutes

ab194713 was shown to recognize IKK beta in wild-type HAP1 cells as signal was lost at the expected MW in IKKBK (IKK beta) knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and IKKBK (IKK beta) knockout samples were subjected to SDS-PAGE. Ab194713 and **ab184095** (Mouse monoclonal [mAbcam 9484] to GAPDH - Loading Control (Alexa Fluor® 680) loading control) were incubated overnight at 4°C at 1/5000 dilution and 1/20000 dilution respectively. The loading control was imaged using the Licor Odyssey CLx prior to blots being developed with ECL technique.



Western blot - HRP Anti-IKK beta antibody [Y466]  
(ab194713)

HRP Anti-IKK beta antibody [Y466] (ab194713) at 1/5000 dilution +  
Daudi (Human Burkitt's lymphoma cell line) Whole Cell Lysate at 10  
µg

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 87 kDa




**Observed band size:** 87 kDa

**Exposure time:** 20 minutes

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes.

The membrane was then blocked for an hour using 2% milk before being incubated with ab194713 overnight at 4°C. Antibody binding was visualised using ECL development solution **ab133406**.

Why choose a recombinant antibody?

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

HRP Anti-IKK beta antibody [Y466] (ab194713)

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

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