

# IKK beta (Phospho-Tyr188) Antibody

Catalog No: #11929

Package Size: #11929-1 50ul #11929-2 100ul

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## Description

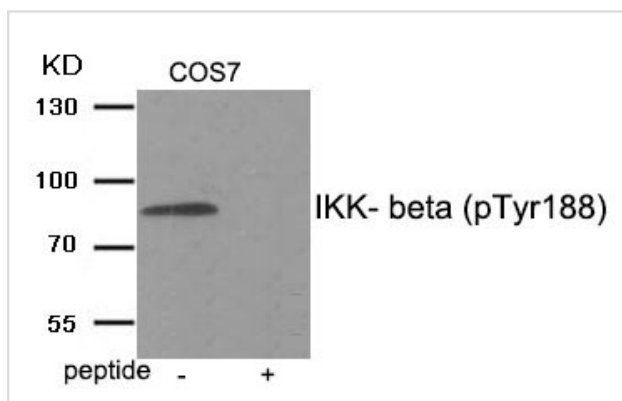
Product Name	IKK beta (Phospho-Tyr188) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Isotype	IgG
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Applications	WB IHC
Species Reactivity	Human;Mouse;Rat
Specificity	The antibody detects endogenous level of IKK- beta only when phosphorylated at tyrosine 188.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of tyrosine 188 (L-Q-Y(p)-L-A) derived from Human IKK- beta.
Conjugates	Unconjugated
Target Name	IKK- beta
Modification	Phospho
Other Names	I-kappa-B kinase 2; I-kappa-B-kinase beta; IKK-B; IKK2; IkbKB
Accession No.	Swiss-Prot#: O14920; NCBI Gene#: 3551; NCBI Protein#: NP_001177649.1
Calculated MW	87 kDa
SDS-PAGE MW	87 kDa
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C/1 year

## Application Details

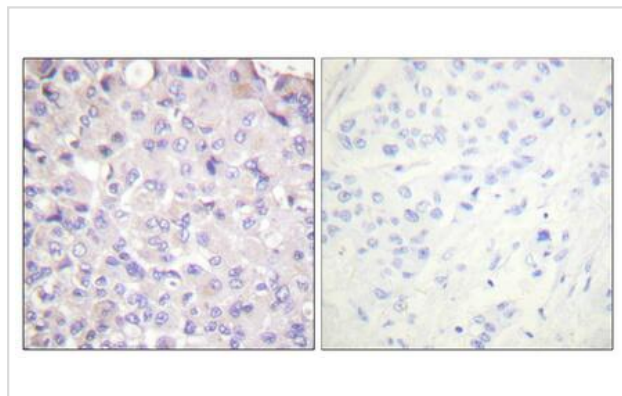
WB 1:500 - 1:2000.

IHC 1:100 - 1:300

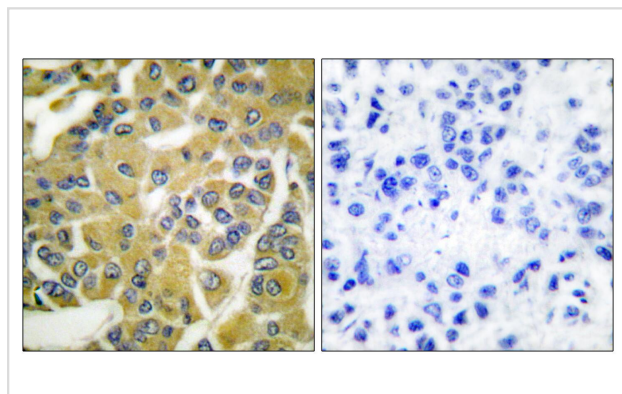
## Images



Western blot analysis of extracts from COS7 tissue using IKK-beta (Phospho-Tyr188) antibody #11929. The lane on the right is treated with the antigen-specific peptide.



Immunohistochemical analysis of paraffin-embedded Human breast cancer. Antibody was diluted at 1:100 (4° overnight). High-pressure and temperature Tris-EDTA, pH 8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using IKK-beta (Phospho-Tyr188) Antibody. The picture on the right is blocked with the phospho peptide.

## Background

Serine kinase that plays an essential role in the NF-kappa-B signaling pathway which is activated by multiple stimuli such as inflammatory cytokines, bacterial or viral products, DNA damages or other cellular stresses. Acts as part of the canonical IKK complex in the conventional pathway of NF-kappa-B activation and phosphorylates inhibitors of NF-kappa-B on 2 critical serine residues. These modifications allow polyubiquitination of the inhibitors and subsequent degradation by the proteasome. In turn, free NF-kappa-B is translocated into the nucleus and activates the transcription of hundreds of genes involved in immune response, growth control, or protection against apoptosis. In addition to the NF-kappa-B inhibitors, phosphorylates several other components of the signaling pathway including NEMO/IKBKG, NF-kappa-B subunits RELA and NFKB1, as well as IKK-related kinases TBK1 and IKBKE. IKK-related kinase phosphorylations may prevent the overproduction of inflammatory mediators since they exert a negative regulation on canonical IKKs. Also phosphorylates other substrates including NCOA3, BCL10 and IRS1. Within the nucleus, acts as an adapter protein for NFKBIA degradation in UV-induced NF-kappa-B activation.

Darwech I, Otero JE, Alhawagri MA, Abu-Amer Y (2010) *J Biol Chem* 285, 25522-30

Huang WC, Chen JJ, Inoue H, Chen CC (2003) *J Immunol* 170, 4767-75

Huang WC, Chen JJ, Chen CC (2003) *J Biol Chem* 278, 9944-52

## Published Papers

el at., Anti-inflammatory and analgesic activities of indigo through regulating the IKK $\beta$ /I $\kappa$ B/NF- $\kappa$ B pathway in mice. In *Food Funct* on 2020 Oct 1 by Ning Liu, Guo-Xin Zhang, et al. PMID:33084638, (2020)

PMID:33084638

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el at., Gingerenone A Attenuates Ulcerative Colitis via Targeting IL-17RA to Inhibit Inflammation and Restore Intestinal Barrier Function. In Adv Sci (Weinh) on 2024 Jul by Jian Liang, Weigang Dai,et al..PMID:38639442, , (2024)

PMID:38639442

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Note: This product is for in vitro research use only and is not intended for use in humans or animals.