IKK- beta (Phospho-Tyr188) Antibody

Catalog No: #11929

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

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

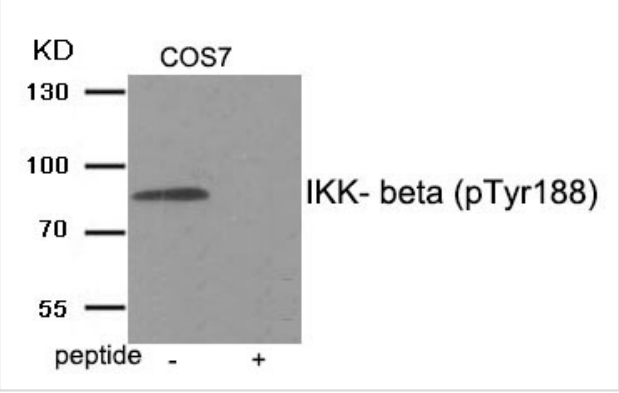
Description

Product Name	IKK- beta (Phospho-Tyr188) Antibody
Host Species	Rabbit
Clonality	Polyclonal
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 chromatogramphy using non-phosphopeptide.
Applications	WB IHC
Species Reactivity	Hu Ms Rt
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.
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
Uniprot	O14920
GeneID	3551;
SDS-PAGE MW	87kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C/1 year

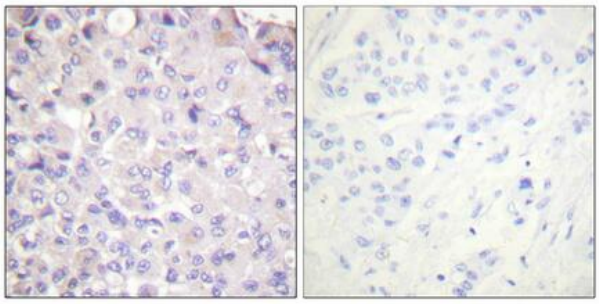
Application Details

WB 1:500 - 1:2000. IHC 1:100 - 1:300

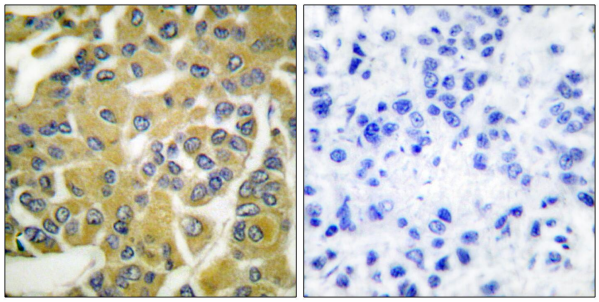
Images



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,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned 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

Note: This product is for in vitro research use only