Kit Includes	Quantity	Applications	Reactivity	MW (kDa)	Isotype
IKKα Antibody #2682	40 µl	W IP	H M R Mk (B)	85	Rabbit
IKKβ Antibody #2684	40 µl	W	H Mk	87	Rabbit
IKKγ Antibody #2685	40 µl	W IHC-P	H M R Mk	48	Rabbit
IKKε Antibody #2690	40 µl	W	H M R	80	Rabbit
Anti-rabbit IgG, HRP-linked Antibody #7074	100 µl				Goat

Applications Key: W=Western Blotting IP=Immunoprecipitation IHC-P=Immunohistochemistry (Paraffin)

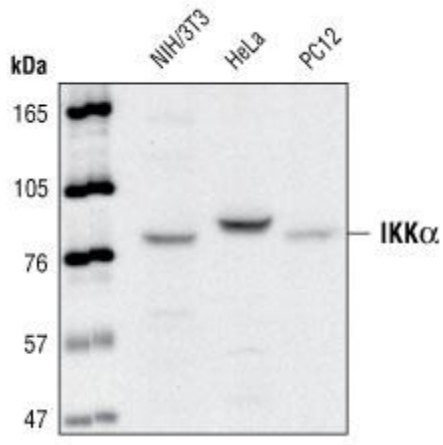
Reactivity Key: H=Human M=Mouse R=Rat Mk=Monkey B=Bovine

Species enclosed in parentheses are predicted to react based on 100% sequence homology.

Specificity / Sensitivity

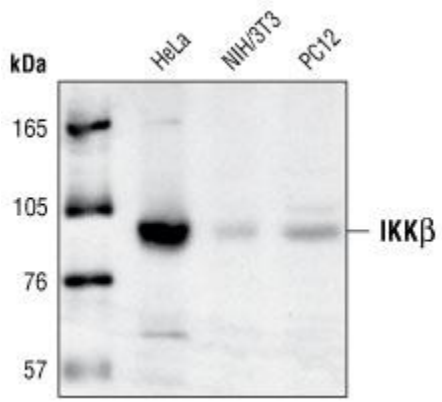
IKKα, IKKβ, IKKγ, and IKKε antibodies detect endogenous levels of total IKKα, IKKβ, IKKγ and IKKε proteins, respectively. These antibodies do not cross-react with IKK subunits other than their specified target.

Western Blotting



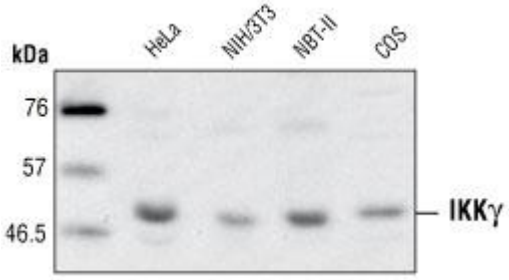
Western blot analysis of extracts from NIH/3T3, HeLa and PC12 cells using IKKα Antibody #2682.

Western Blotting



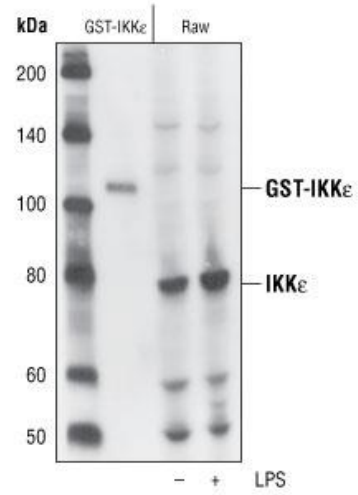
Western blot analysis of extracts from HeLa, NIH/3T3 and PC12 cells using IKKβ Antibody #2684.

Western Blotting



Western blot analysis of extracts from various cell types using IKKγ Antibody #2685.

Western Blotting



Western blot analysis of recombinant IKKε Kinase #7553 and Raw 264.7 cells, untreated or LPS-treated, using IKKε Antibody #2690.

Description

The IKK Isoform Antibody Sampler Kit provides an economical means to investigate NFkappaB signaling within the cell. The kit contains primary and secondary antibodies to perform four Western blots with each antibody.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues at the carboxyl terminus of human IKKβ, IKKε and IKKγ, to the 20 amino-terminal residues of human IKKα. Antibodies are purified by protein A and peptide affinity chromatography.

Background

The NF-κB/Rel transcription factors are present in the cytosol in an inactive state, complexed with the inhibitory IκB proteins (1-3). Most agents that activate NF-κB do so through a common pathway based on phosphorylation-induced, proteasome-mediated degradation of IκB (3-7). The key regulatory step in this pathway involves activation of a high molecular weight IκB kinase (IKK) complex whose catalysis is generally carried out by three tightly associated IKK subunits. IKKα and IKKβ serve as the catalytic subunits of the kinase and IKKγ serves as the regulatory subunit (8,9). Activation of IKK depends upon phosphorylation at Ser177 and Ser181 in the activation loop of IKKβ (Ser176 and Ser180 in IKKα), which causes conformational changes, resulting in kinase activation (10-13).

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