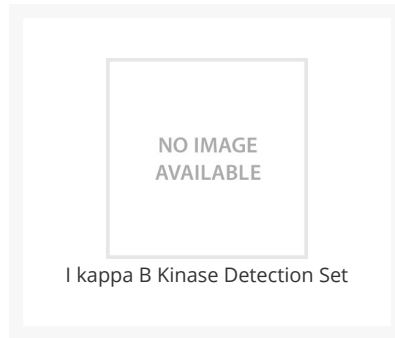




I kappa B Kinase Detection Set

Cat. No.: PSI-1821



Ψ Specifications

SPECIES REACTIVITY:	Human
IMMUNOGEN:	Rabbit polyclonal antibodies were raised against peptides corresponding to amino acid sequences from each of the corresponding proteins.
TESTED APPLICATIONS:	ICC, IF, IHC, WB
APPLICATIONS:	These polyclonal antibodies can be used for detection of IKK α , IKK β , IKK γ and IKK ϵ by immunoblot at 0.5 - 2 μ g/mL, and by immunocytochemistry (IKK α , IKK β and IKK γ) or immunohistochemistry (IKK ϵ) at 1 - 10 μ g/mL, and Immunofluorescence.
POSITIVE CONTROL:	1) IKK α Antibody: HeLa Cell Lysate, Catalog No. 1201 IKK β Antibody: Jurkat Cell Lysate, Catalog No. 1223 IKK γ Antibody: HeLa Cell Lysate, Catalog No. 1201 IKK ϵ Antibody: Jurkat Cell Lysate, Catalog No. 1223

Ψ Properties

PURIFICATION:	Antibodies are supplied as affinity chromatography purified IgG.
PHYSICAL STATE:	Liquid
BUFFER:	PBS containing 0.02% sodium azide.

CONCENTRATION:	Antibody 1 mg/mL
STORAGE CONDITIONS:	Stable at 4 °C for three months, store at -20 °C for up to one year.

Ψ Additional Info

USER NOTE:	Optimal dilutions for each application to be determined by the researcher.
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Ψ Background and References

BACKGROUND:	<p>Nuclear factor kappa B (NF-κB) is a ubiquitous transcription factor and an essential mediator of gene expression during activation of immune and inflammatory responses. NF-κB mediates the expression of a great variety of genes in response to extracellular stimuli including IL-1, TNFα, and bacteria product LPS. NF-κB is associated with IκB proteins in the cell cytoplasm, which inhibit NF-κB activity. IκB kinase (IKK), which phosphorylates IκB and mediates IκB degradation and NF-κB activation, was recently identified by several laboratories. IKK is a serine protein kinase, and the IKK complex contains alpha and beta subunits (IKKα and IKKβ). IKKα and IKKβ interact with each other and both are essential for the NF-κB activation. IKKα specifically phosphorylates IκB-α, while IKKβ phosphorylates both IκB-α and IκB-β. Another molecule in the IKK complex termed IKKγ (also known as NEMO) interacts with IKKβ and is required for the activation of IKK complex and NF-κB by LPS, PMA, TNF, and IL-1 stimulation. IKKγ was also shown to bind to RIP and NIK and to mediate TNF-induced NF-κB activation. IKKε is required for the activation of NF-κB by PMA and T cell receptors but not by TNFα and IL-1. IKKε message is expressed in a variety of tissues and is inducible by TNFα, IL-1, and LPS.</p> <p>For images please see PDF data sheet</p>
REFERENCES:	<p>1) DiDonato JA, Hayakawa M, Rothwarf DM, et al. A cytokine-responsive IκappaB kinase that activates the transcription factor NF-kappaB. <i>Nature</i> 1997; 388:548-54.</p> <p>2) Regnier CH, Song HY, Gao X, et al. Identification and characterization of an IκappaB kinase. <i>Cell</i> 1997; 90:373-83.</p> <p>3) Zandi E, Rothwarf DM, Delhase M, et al. The IκappaB kinase complex (IKK) contains two kinase subunits, IKKalpha and IKKbeta, necessary for IκappaB phosphorylation and NF-kappaB activation. <i>Cell</i> 1997; 91:243-52.</p> <p>4) Woronicz JD, Gao X, Cao Z, et al. IκappaB kinase-beta: NF-kappaB activation and complex formation with IκappaB kinase-alpha and NIK. <i>Science</i> 1997; 278:866-9.</p>

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