**IKKβ Antibody**

For Research Use Only. Not For Use In Diagnostic Procedures.

**Background:** The NFκB/Rel transcription factors are present in the cytosol in an inactive state, complexed with the inhibitory IκB proteins (1–3). Most agents that activate NFκB 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. IKKγ serves as the regulatory subunit (8–9). Activation of IKK depends on phosphorylation; serines 177 and 181 in the activation loop of IKKβ (176 and 180 in IKKα) are the specific sites whose phosphorylation causes conformational changes resulting in kinase activation (10–13).

**Specificity/Sensitivity:** IKKβ Antibody detects endogenous levels of total IKKβ protein. The antibody does not cross-react with endogenous levels of IKKα or IKKγ.

**Source/Purification:** Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues at the carboxy terminus of human IKKβ. Antibodies are purified by protein A and peptide affinity chromatography.

**Background References:**

**Recommended Antibody Dilutions:**
Western blotting 1:1000

For application specific protocols please see the web page for this product at www.cellsignal.com.

**Storage:** Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

**IMPORTANT:** For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.

**Applications Key:**
- **W**—Western
- **IP**—Immunoprecipitation
- **HC**—Immunohistochemistry
- **CIP**—Chromatin Immunoprecipitation
- **IF**—Immunofluorescence
- **FC**—Flow cytometry
- **E-P**—ELISA-Peptide

**Species Cross-Reactivity Key:**
- **H**—human
- **M**—mouse
- **R**—rat
- **Hm**—hamster
- **Mk**—monkey
- **Ml**—mink
- **C**—chicken
- **Dm**—D. melanogaster
- **X**—Xenopus
- **Z**—zebrafish
- **B**—bovine
- **Dg**—dog
- **Pg**—pig
- **Sc**—S. cerevisiae
- **C**—C. elegans
- **Hr**—horse
- **All**—all species expected

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

© 2014 Cell Signaling Technology, Inc.

Orders  877-616-CELL (2355)
orders@cellsignal.com

Support  877-678-TECH (8324)
info@cellsignal.com

Web  www.cellsignal.com

Entrez-Gene ID #3551
UniProt ID #O14920

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:
Western blotting 1:1000

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.