

#2370 Store at -20°C

IKKβ (2C8) Rabbit mAb



✓ 100 µl (10 western blots)

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Entrez-Gene ID #3551
Swiss-Prot Acc. #O14920

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W Endogenous	H, M, R, Mk	87 kDa	Rabbit IgG**

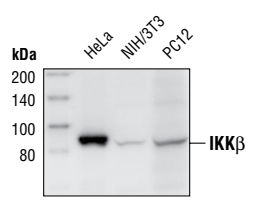
Background: The NFκB/Rel transcription factors are present in the cytosol in an inactive state, complexed with the inhibitory IκB proteins (1–3). Most agents that activate NFκB do so through a common pathway based on phosphorylation-induced, proteasome-mediated degradation of IκB (3–7). The key regulatory 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 (serine 176 and 180 in IKKα) are the specific sites whose phosphorylation causes conformational changes resulting in kinase activation (10–13).

Specificity/Sensitivity: IKKβ (2C8) Rabbit mAb detects endogenous levels of total IKKβ protein. The antibody does not cross-react with IKKα or IKKγ.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues at the carboxy terminus of human IKKβ protein.

Background References:

- (1) Baeuerle, P.A. et al. (1988) *Science* 242, 540–546.
- (2) Beg, A.A. et al. (1993) *Genes Dev.* 7, 2064–2070.
- (3) Finco, T.S. et al. (1994) *Proc. Natl. Acad. Sci. USA* 91, 11884–11888.
- (4) Brown, K. et al. (1995) *Science* 267, 1485–1488.
- (5) Brockman, J.A. et al. (1995) *Mol. Cell. Biol.* 15, 2809–2818.



Western blot analysis of extracts from HeLa, NIH/3T3 and PC-12 cells using IKKβ (2C8) Rabbit mAb.

- (6) Traenckner, E.B. et al. (1995) *EMBO J.* 14, 2876–2883.
- (7) Chen, Z.J. et al. (1996) *Cell* 84, 853–862.
- (8) Zandi, E. et al. (1997) *Cell* 91, 243–252.
- (9) Karin, M. et al. (1999) *Oncogene* 18, 6867–6874.
- (10) DiDonato, J.A. et al. (1997) *Nature* 388, 548–554.
- (11) Mercurio, F. et al. (1997) *Science* 278, 860–866.
- (12) Johnson, L.N. et al. (1996) *Cell* 85, 149–158.
- (13) Delhase, M. et al. (1999) *Science* 284, 309–313.

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.

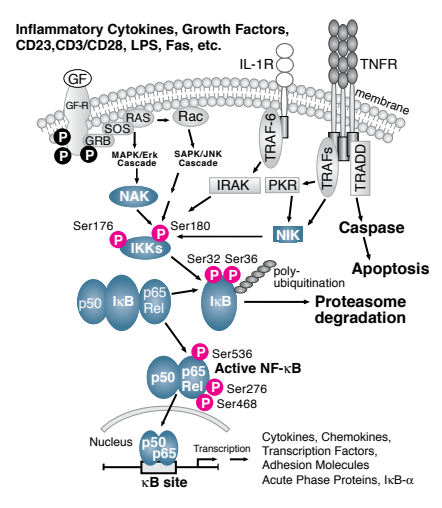
**Anti-rabbit secondary antibodies must be used to detect this antibody.

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.



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.

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Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
 Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.