Revision 1

Store at -20C

#3987

NF-κB p65 (E498) Antibody

Cell Signaling TECHNOLOGY®

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP, IHC-P, IF-IC, FC-FP	H M R Hm Mk Mi B Dg Pg GP	Endogenous	65	Rabbit	#Q04206	5970

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Immunoprecipitation	1:50
Immunohistochemistry (Paraffin)	1:200
Immunofluorescence (Immunocytochemistry)	1:100
Flow Cytometry (Fixed/Permeabilized)	1:100

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.

Specificity/Sensitivity

NF-κB p65 (E498) Antibody detects endogenous levels of total NF-κB p65/RelA protein. It does not cross-react with other NF-κB/Rel family members.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Glu498 of human NF-κB p65/RelA protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

Transcription factors of the nuclear factor κB (NF-κB)/Rel family play a pivotal role in inflammatory and immune responses (1,2). There are five family members in mammals: RelA, c-Rel, RelB, NF-κB1 (p105/p50), and NF-κB2 (p100/p52). Both p105 and p100 are proteolytically processed by the proteasome to produce p50 and p52, respectively. Rel proteins bind p50 and p52 to form dimeric complexes that bind DNA and regulate transcription. In unstimulated cells, NF-κB is sequestered in the cytoplasm by IκB inhibitory proteins (3-5). NF-κB-activating agents can induce the phosphorylation of IκB proteins, targeting them for rapid degradation through the ubiquitin-proteasome pathway and releasing NF-κB to enter the nucleus where it regulates gene expression (6-8). NIK and IKKα (IKK1) regulate the phosphorylation and processing of NF-κB2 (p100) to produce p52, which translocates to the nucleus (9-11).

Background References

1. Baeuerle, P.A. and Henkel, T. (1994) *Annu Rev Immunol* 12, 141-79.
2. Baeuerle, P.A. and Baltimore, D. (1996) *Cell* 87, 13-20.
3. Haskill, S. et al. (1991) *Cell* 65, 1281-9.
4. Thompson, J.E. et al. (1995) *Cell* 80, 573-82.
5. Whiteside, S.T. et al. (1997) *EMBO J* 16, 1413-26.
6. Traenckner, E.B. et al. (1995) *EMBO J* 14, 2876-83.
7. Scherer, D.C. et al. (1995) *Proc Natl Acad Sci USA* 92, 11259-63.
8. Chen, Z.J. et al. (1996) *Cell* 84, 853-62.
9. Senftleben, U. et al. (2001) *Science* 293, 1495-9.
10. Coope, H.J. et al. (2002) *EMBO J* 21, 5375-85.
11. Xiao, G. et al. (2001) *Mol Cell* 7, 401-9.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

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

Applications Key

W: Western Blotting **IP:** Immunoprecipitation **IHC-P:** Immunohistochemistry (Paraffin) **IF-IC:** Immunofluorescence (Immunocytochemistry) **FC-FP:** Flow Cytometry (Fixed/Permeabilized)

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Hm:** Hamster **Mk:** Monkey **Mi:** Mink **B:** Bovine **Dg:** Dog **Pg:** Pig **GP:** Guinea Pig

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