

Store at -20C  
#30656**NF-κB p65 (D14E12) XP® Rabbit mAb (Biotinylated)**
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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	H M R Hm Mk Dg	Endogenous	65	Rabbit IgG	#Q04206	5970

**Product Usage Information****Application**

Western Blotting

**Dilution**

1:1000

**Storage**
 Supplied in 140 mM NaCl, 3 mM KCl, 10 mM sodium phosphate (pH 7.4) dibasic, 2 mM potassium phosphate monobasic, 2 mg/mL BSA, and 50% glycerol. Store at -20°C. *Do not aliquot the antibody.*
**Specificity/Sensitivity**

NF-κB p65 (D14E12) XP® Rabbit mAb (Biotinylated) recognizes endogenous levels of total NF-κB p65/RelA protein. It does not cross react with other NF-κB/Rel family members.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Glu498 of human NF-κB p65/RelA protein.

**Description**

This Cell Signaling Technology antibody is conjugated to biotin under optimal conditions. The biotinylated antibody is expected to exhibit the same species cross-reactivity as the unconjugated NF-κB p65 (D14E12) XP® Rabbit mAb #8242.

**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.
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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.
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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 nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

**Applications Key**
**W:** Western Blotting
**Cross-Reactivity Key**
**H:** Human **M:** Mouse **R:** Rat **Hm:** Hamster **Mk:** Monkey **Dg:** Dog
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