

Store at  
-20°C

# PhosphoPlus® NF-κB p65/RelA (Ser536) Antibody Duet



Cell Signaling  
TECHNOLOGY®

#8214

New 06/18

Support: +1-978-867-2388 (U.S.)  
www.cellsignal.com/support

Orders: 877-616-2355 (U.S.)  
orders@cellsignal.com

Entrez-Gene ID #5970  
UniProt ID #Q04206

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

Products Included	Product #	Quantity	Mol. Wt.	Isotype/Source
Phospho-NF-κB p65 (S536) (93H1) Rabbit mAb	3033	100 μl	65 kDa	Rabbit IgG
NF-κB p65 (D14E12) XP® Rabbit mAb	8242	100 μl	65 kDa	Rabbit IgG

See [www.cellsignal.com](http://www.cellsignal.com) for individual component applications, species cross-reactivity, dilutions, and additional application protocols.

**Description:** PhosphoPlus® Duets from Cell Signaling Technology (CST) provide a means to assess protein activation status. Each Duet contains an activation-state and total protein antibody to your target of interest. These antibodies have been selected from CST's product offering based upon superior performance in specified applications.

**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).

**Specificity/Sensitivity:** NF-κB p65 (D14E12) XP® Rabbit mAb recognizes endogenous levels of total NF-κB p65/RelA protein. Phospho-NF-κB p65 (Ser536) (93H1) Rabbit mAb detects NF-κB p65 only when phosphorylated at Ser536. The antibodies do not cross react with other NF-κB/Rel family members

**Source/Purification:** Monoclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Glu498 of human NF-κB p65/RelA protein and a phosphopeptide corresponding to residues surrounding Ser536 of human NF-κB p65/RelA protein.

**Storage:** Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

#### 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.

Thank you for your recent purchase. If you would like to provide a review visit [www.cellsignal.com/comments](http://www.cellsignal.com/comments).

[www.cellsignal.com](http://www.cellsignal.com)

© 2018 Cell Signaling Technology, Inc.

PhosphoPlus and Cell Signaling Technology are trademarks of Cell Signaling Technology, Inc.

**Applications:** W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide **Species Cross-Reactivity:** 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.