

#4810 Store at -20°C

## Phospho-NF- $\kappa$ B2 p100 (Ser866/870) Antibody



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

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**Web:** info@cellsignal.com  
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3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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

Applications: WB, IP	Reactivity: H M	Sensitivity: Transfected Only	MW (kDa): 110	Source: Rabbit	UniProt ID: #Q00653	Entrez-Gene Id: 4791
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### Product Usage Information

#### Application

Western Blotting  
Immunoprecipitation

#### Dilution

1:1000  
1:50

### 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

Phospho-NF- $\kappa$ B2 p100 (Ser866/870) Antibody detects transfected NF- $\kappa$ B2 p100 when phosphorylated at serines 866 and 870.

### Species predicted to react based on 100% sequence homology:

Rat, Bovine, Dog

### Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding serines 866/870 of NF- $\kappa$ B2 p100. Nomenclature refers to the human sequence (SwissProt# Q00653). This site is homologous to rat Ser864/868 (Q5U2Z4) and mouse Ser865/869 (Q9WTK5). Antibodies are purified by protein A and peptide affinity chromatography.

### Background

Transcription factors of the nuclear factor  $\kappa$ B (NF- $\kappa$ B)/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- $\kappa$ B1 (p105/p50), and NF- $\kappa$ B2 (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- $\kappa$ B is sequestered in the cytoplasm by I $\kappa$ B inhibitory proteins (3-5). NF- $\kappa$ B-activating agents can induce the phosphorylation of I $\kappa$ B proteins, targeting them for rapid degradation through the ubiquitin-proteasome pathway and releasing NF- $\kappa$ B to enter the nucleus where it regulates gene expression (6-8). NIK and IKK $\alpha$  (IKK1) regulate the phosphorylation and processing of NF- $\kappa$ B2 (p100) to produce p52, which translocates to the nucleus (9-11).

### Background References

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3. Haskill, S. et al. (1991) *Cell* 65, 1281-9.
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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.
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9. Senftleben, U. et al. (2001) *Science* 293, 1495-9.
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### 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

**WB:** Western Blotting **IP:** Immunoprecipitation

### Cross-Reactivity Key

**H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **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  
**GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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