

#3045 Store at -20C

Acetyl-NF- κ B p65 (Lys310) Antibody


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

Applications: WB, IP	Reactivity: H M	Sensitivity: Transfected Only	MW (kDa): 65	Source: Rabbit	UniProt ID: #Q04206	Entrez-Gene Id: 5970
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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 μ g/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity / Sensitivity

Acetyl-NF- κ B p65 (Lys310) Antibody detects transfected levels of NF- κ B only when acetylated at Lys310.

Species predicted to react based on 100% sequence homology:

Rat, Monkey, Bovine, Dog

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic acetylated peptide corresponding to residues surrounding Lys310 of NF- κ B. Antibodies were purified by protein A and peptide affinity chromatography.

Background

Transcription factors of the nuclear factor κ B (NF- κ 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- κ B1 (p105/p50), and NF- κ 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- κ B is sequestered in the cytoplasm by I κ B inhibitory proteins (3-5). NF- κ B-activating agents can induce the phosphorylation of I κ B proteins, targeting them for rapid degradation through the ubiquitin-proteasome pathway and releasing NF- κ B to enter the nucleus where it regulates gene expression (6-8). NIK and IKK α (IKK1) regulate the phosphorylation and processing of NF- κ B2 (p100) to produce p52, which translocates to the nucleus (9-11). NF- κ B assembly with I κ B, as well as its DNA binding and transcriptional activity, are regulated by p300/CBP acetyltransferases that principally target Lys218, Lys221 and Lys310 (12-14). This process is reciprocally regulated by histone deacetylases (HDACs); several HDAC inhibitors have been shown to activate NF- κ B (12-14).

Background References

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13. Mayo, M.W. et al. (2003) *J. Biol. Chem.* 278, 18980-1899.
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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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