

RelB (D7D7W) Rabbit mAb

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

Applications: W, IP, IHC-P, IF-IC, FC-FP, ChIP, ChIP- seq, C&R	Reactivity: H M R	Sensitivity: Endogenous	MW (kDa): 70	Source/Isotype: Rabbit IgG	UniProt ID: #Q01201	Entrez-Gene Id: 5971
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Product Usage Information

For optimal ChIP and ChIP-seq results, use 10 µl of antibody and 10 µg of chromatin (approximately 4 x 10⁶ cells) per IP. This antibody has been validated using SimpleChIP® Enzymatic Chromatin IP Kits.

The CUT&RUN dilution was determined using CUT&RUN Assay Kit #86652.

Application

Western Blotting
Immunoprecipitation
Immunohistochemistry (Paraffin)
Immunofluorescence (Immunocytochemistry)
Flow Cytometry (Fixed/Permeabilized)
Chromatin IP
Chromatin IP-seq
CUT&RUN

Dilution

1:1000
1:100
1:800 - 1:3200
1:800 - 1:1600
1:800 - 1:3200
1:50
1:50
1:50

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.

For a carrier free (BSA and azide free) version of this product see product #34279.

Specificity/Sensitivity

RelB (D7D7W) Rabbit mAb recognizes endogenous levels of total RelB protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with recombinant protein specific to the carboxy terminus of human RelB protein.

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).

RelB, which is generally activated by non-canonical signaling, forms heterodimers with either p50 or p52 NF-κB subunits to regulate transcription (12,13). RelB knockout mice have significant impairments toward inflammatory responses and hematopoietic differentiation (14,15).

Background References

- Baeuerle, P.A. and Henkel, T. (1994) *Annu Rev Immunol* 12, 141-79.
- Baeuerle, P.A. and Baltimore, D. (1996) *Cell* 87, 13-20.
- Haskill, S. et al. (1991) *Cell* 65, 1281-9.
- Thompson, J.E. et al. (1995) *Cell* 80, 573-82.
- Whiteside, S.T. et al. (1997) *EMBO J* 16, 1413-26.
- Traenckner, E.B. et al. (1995) *EMBO J* 14, 2876-83.
- Scherer, D.C. et al. (1995) *Proc Natl Acad Sci USA* 92, 11259-63.
- Chen, Z.J. et al. (1996) *Cell* 84, 853-62.
- Senftleben, U. et al. (2001) *Science* 293, 1495-9.
- Coope, H.J. et al. (2002) *EMBO J* 21, 5375-85.
- Xiao, G. et al. (2001) *Mol Cell* 7, 401-9.
- Ryseck, R.P. et al. (1992) *Mol Cell Biol* 12, 674-84.
- Bours, V. et al. (1994) *Oncogene* 9, 1699-702.

14. Weih, F. et al. (1995) *Cell* 80, 331-40.
15. Burkly, L. et al. (1995) *Nature* 373, 531-6.
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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	W: Western Blotting IP: Immunoprecipitation IHC-P: Immunohistochemistry (Paraffin) IF-IC: Immunofluorescence (Immunocytochemistry) FC-FP: Flow Cytometry (Fixed/Permeabilized) ChIP: Chromatin IP ChIP-seq: Chromatin IP-seq C&R: CUT&RUN
Cross-Reactivity Key	H: Human M: Mouse R: Rat
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