



Qty: 100 µg/200 µL

Mouse anti-RelB

Catalog No. 437500

Mouse anti-RelB

FORM

This affinity-purified mouse monoclonal antibody is supplied as a 200 µL aliquot at a concentration of 0.5 mg/mL in PBS, pH 7.4, containing 0.1% sodium azide. This antibody is highly purified from mouse ascites by protein A chromatography.

Clone: 17.3

Isotype: IgG1

IMMUNOGEN

Recombinant protein derived from C-terminal region of human RelB protein.

SPECIFICITY

This antibody is specific for human RelB (I-Rel) protein (accession # NP_006500, Q01201), which is 96% homologous with Rhesus monkey, 86% with canine and 84% with bovine and mouse. On Western blots of human Raji cell lysates, it identifies the target band at ~63 kDa.

REACTIVITY

Reactivity has been confirmed with human Raji cell lysates using Western blotting. The reactivity has been also confirmed with human Raji cells using immunoprecipitation and immunofluorescence. Based on amino acid sequence homology, reactivity with Rhesus monkey is also expected.

Sample	Western Blotting	Immunofluorescence	Immunoprecipitation
Human	+++	+++	+++
Monkey (Rhesus)	ND	ND	ND

(Excellent +++, Good ++, Poor +, No reactivity 0, Not applicable N/A, Not determined ND)

USAGE

Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

Western Blotting:	2 µg/mL
Immunofluorescence:	2 µg/mL
Immunoprecipitation:	5 µg/IP reaction

(cont')

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STORAGE

Store at 2-8°C for up to one month. Store at -20°C for long-term storage. Avoid repeated freezing and thawing.

BACKGROUND

Rel/NF- κ B proteins are a family of transcription factors consisting of homo and heterodimers characterized by the highly conserved DNA-binding/dimerization domain called the Rel homology region.¹ The members of the family include p50, p52, p65, c-Rel, and RelB. The best-characterized members of NF- κ B family are p50/p65 heterodimer and p50/p50 homodimer complexes. In most cells NF- κ B is present in the cytoplasm in an inactive form bound to inhibitor protein (I κ B). I κ B masks the NF- κ B's nuclear binding domain via a noncovalent binding association. A wide variety of endogenous and exogenous molecules such as cytokines, growth factors, viruses and environmental hazards can facilitate dissociation of the I κ B/NF- κ B complex.² RelB is particularly involved in the expression of genes important in immune responses. Constitutive basal NF- κ B activities in lymphoid tissues correlate with high levels of RelB expression.³ RelB and p50 cooperate in the regulation of genes that limit inflammation. The importance of RelB in lymphoid organogenesis has been studied in mice. RelB negative mice are unable to form germinal centers (GCs), marginal zone structure, and follicular dendritic cell network upon antigen challenge in spleen.⁴

Deregulation of NF- κ B and I κ B phosphorylations is a hallmark of chronic inflammatory diseases and cancer.⁵ It has been shown that RelB plays an important role in redox regulation of the cell and protects aggressive prostate cancer cells against radiation-induced cell death.⁶

REFERENCES

1. Hoffman A et al. *EMBO J* 22(20):5530-9, 2003.
2. Martucci C et al. *J Leukoc Biol*. 81(1):344-54, 2007.
3. Benjamin B et al. *J Biol Chem* 277: 24694-24700, 2002.
4. Falk W et al. *J Exp Med* 185(7): 1359-1370, 1997.
5. Viatour P et al. *Trends Biochem Sci* 30(1):43-52, 2005.
6. Jossion S et al. *Oncogene* 25(10):1554-9, 2006.

RELATED PRODUCTS

Product	Conjugate	Cat. No.
Protein A	Sepharose 4B	10-1041
rec-Protein G	Sepharose 4B	10-1241
ZyMAX™ Goat anti-rabbit IgG	Unconjugated	81-6100
ZyMAX™ Goat anti-mouse IgG	Unconjugated	81-6500

Secondary antibody conjugates.

Conjugate	Goat anti-rabbit IgG (H+L)	Goat anti-mouse IgG (H+L)	Ex/Em*	Fluorescence similar to--
Alexa Fluor® 488	A11008	A11001	495/519	FITC
Alexa Fluor® 555	A21428	A21422	555/565	Cy3
Alexa Fluor® 594	A11012	A11005	590/617	Texas Red
Alexa Fluor® 647	A21244	A21235	650/668	Cy5
HRP	81-6120	81-6520	NA**	NA
AP	81-6122	81-6522	NA	NA
Biotin	B2770	B2763	NA	NA

*Excitation/emission (nm); **Not applicable

For additional secondary antibody conjugates, visit www.invitrogen.com/antibodies

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