

PRODUCT INFORMATION

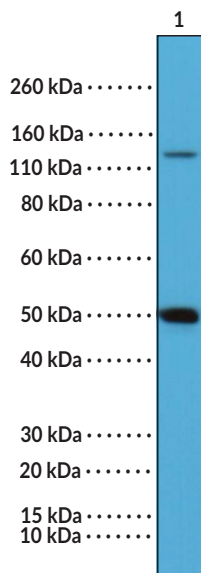
NF- κ B (p105/p50) Rabbit Monoclonal Antibody (Clone RM299)

Item No. 35314

Overview and Properties

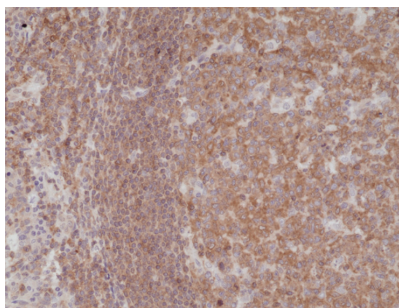
Contents:	This vial contains 100 μ l of protein A-affinity purified monoclonal antibody.
Synonym:	Nuclear Factor- κ B (p105/p50)
Immunogen:	A peptide corresponding to residues in the human NF-kappa-B p105 subunit and p50 subunit
Cross Reactivity:	(+) NF- κ B (p105/p50)
Species Reactivity:	(+) Human
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	$\geq$ 1 year
Storage Buffer:	PBS with 50% glycerol, 1% BSA, and 0.09% sodium azide
Clone:	RM229
Host:	Rabbit
Isotype:	IgG
Applications:	Immunohistochemistry (IHC) and Western blot (WB); the recommended starting dilution for IHC and WB is 1:100-1:200. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Images



Lane 1: HeLa cell lysates

WB of HeLa cell lysates using NF- κ B (p105/p50) Rabbit Monoclonal Antibody (Clone RM299) at a dilution of 1:100.



Immunohistochemical staining of formalin-fixed and paraffin-embedded human tonsil tissue using NF- κ B (p105/p50) Rabbit Monoclonal Antibody (Clone RM299) at a dilution of 1:200.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 01/19/2024

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM

PRODUCT INFORMATION



Description

NF- κ B is a ubiquitously expressed transcription factor composed of varied combinations of five subunits: p65/RelA, RelB, c-Rel, p105/p50, and p100/p52.¹⁻³ The NF- κ B p50 subunit is a truncated version of p105 that lacks ankyrin repeat domains.² The p105 subunit can be phosphorylated by GSK3 β , which prevents p105 processing and degradation in resting cells.³ In TNF- α -stimulated cells, GSK3 β phosphorylation induces processing of p105 into p50, which forms a heterodimer with p65 and is translocated to the nucleus to initiate the transcription of a variety of genes involved in innate and adaptive immunity. The p105 subunit can also be phosphorylated by the IKK β complex downstream of TNF receptor 1 (TNFR1), inducing processing of p105 into p50, or by tumor progression locus 2 (TPL2) downstream of toll-like receptor 4 (TLR4) activation by LPS. Increased protein levels of NF- κ B, irrespective of cytoplasmic or nuclear localization, are associated with lower overall survival and disease-free survival in patients with solid tumors.⁴ Cayman's NF- κ B (p105/p50) Rabbit Monoclonal Antibody (Clone RM299) can be used for immunohistochemistry (IHC) and Western blot (WB) applications.

References

1. Peterson, J.M., Bakkar, N., and Guttridge, D.C. NF- κ B signaling in skeletal muscle health and disease. *Curr. Top. Devel. Biol.* **96**, 85-119 (2011).
2. Chen, L.-F. and Greene, W.C. Shaping the nuclear action of NF- κ B. *Nat. Rev. Mol. Cell Biol.* **5**(5), 392-401 (2004).
3. Viatour, P., Merville, M.-P., Bours, V., et al. Phosphorylation of NF- κ B and I κ B proteins: Implications in cancer and inflammation. *Trends Biochem. Sci.* **30**(1), 43-52 (2005).
4. Wu, D., Wu, P., Zhao, L., et al. NF- κ B expression and outcomes in solid tumors: A systematic review and meta-analysis. *Medicine (Baltimore)* **94**(40), e1687 (2015).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM