



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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### Lieferung & Zahlungsart

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### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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# PRODUCT INFORMATION



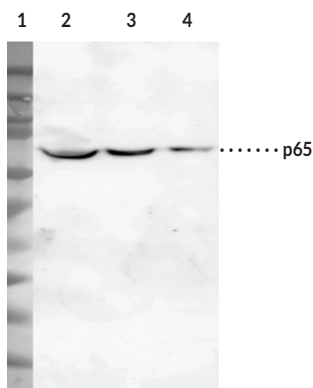
## NF- $\kappa$ B (p65) Polyclonal Antibody

Item No. 20671

### Overview and Properties

<b>Contents:</b>	This vial contains 500 $\mu$ l of peptide affinity-purified polyclonal antibody.
<b>Synonyms:</b>	Nuclear Factor NF- $\kappa$ B (p65) subunit, Transcription Factor p65
<b>Immunogen:</b>	Synthetic peptide from the C-Terminal region of human NF- $\kappa$ B (p65)
<b>Species Reactivity:</b>	(+) Human, other species not tested
<b>Uniprot No.:</b>	Q04206
<b>Form:</b>	Liquid
<b>Storage:</b>	-20°C (as supplied)
<b>Stability:</b>	$\geq$ 3 years
<b>Storage Buffer:</b>	TBS, pH 7.4, with 50% glycerol, 0.1% BSA, and 0.02% sodium azide
<b>Host:</b>	Rabbit
<b>Isotype:</b>	IgG
<b>Applications:</b>	ELISA and Western blot (WB); the recommended starting dilution for ELISA and WB is 1:200. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

### Image



Lane 1: Standard  
Lane 2: HEK293 Cell lysate  
Lane 3: Jurkat Cell lysate  
Lane 4: A549 Cell lysate

**Primary Antibody:** NF- $\kappa$ B (p65) Polyclonal Antibody (Item No. 20671)  
**Secondary Antibody:** Goat Anti-Rabbit IgG HRP (Item No. 10004301)  
Developed by ECL

**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.

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# PRODUCT INFORMATION



## Description

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NF- $\kappa$ B p65 is a ubiquitously expressed transcription factor that is a subunit of the NF- $\kappa$ B complex and is encoded by the RELA gene in humans.<sup>1</sup> It is composed of an N-terminal Rel homology domain, which mediates dimerization, nuclear localization, and DNA and protein interactions, and two C-terminal transactivation domains that are subject to a variety of post-translational modifications and regulate the transcriptional activity of p65.<sup>1,2</sup> NF- $\kappa$ B p65 regulates the expression of a large number of genes in response to inflammatory and environmental cues that play critical roles in innate and adaptive immunity and cellular differentiation.<sup>2</sup> Genome-wide deletion of RelA in mice is embryonic lethal.<sup>3</sup> Silencing of NF- $\kappa$ B p65 induces tumor cell apoptosis in a murine Lewis lung carcinoma model and decreases secreted levels of IL-1 $\beta$  and TNF- $\alpha$  induced by LPS in THP-1 monocytes.<sup>4,5</sup> NF- $\kappa$ B p65 is overexpressed in inflamed joints of patients with rheumatoid arthritis, and naïve CD4 T cells isolated from the whole blood of patients with multiple sclerosis have increased phosphorylation of NF- $\kappa$ B p65.<sup>6,7</sup> Cayman's NF- $\kappa$ B p65 (human, recombinant) protein can be used for Western blot and ELISA applications. Cayman's NF- $\kappa$ B (p65) Polyclonal Antibody can be used for ELISA and Western blot applications. The antibody recognizes NF- $\kappa$ B at 65 kDa from human samples.

## Reference

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1. Peterson, J.M., Bakkar, N., and Guttridge, D.C. NF- $\kappa$ B signaling in skeletal muscle health and disease. *Curr. Top. Dev. Biol.* **96**, 85-119 (2011).
2. Giridharan, S. and Srinivasan, M. Mechanisms of NF- $\kappa$ B p65 and strategies for therapeutic manipulation. *J. Inflamm. Res.* **11**, 407-419 (2018).
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4. Qu, Y., Zhang, X., and Wu, R. Knockdown of NF- $\kappa$ B p65 subunit expression suppresses growth of nude mouse lung tumor cell xenografts by activation of Bax apoptotic pathway. *Neoplasma* **62(1)**, 34-40 (2015).
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7. Housley, W.J., Fernandez, S.D., Vera, K., et al. Genetic variants associated with autoimmunity drive NF $\kappa$ B signaling and responses to inflammatory stimuli. *Sci. Transl. Med.* **7(291)**, 291ra93 (2015).

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