# NFκB p65 (4H211): sc-71675



The Power to Question

# **BACKGROUND**

Proteins encoded by the v-Rel viral oncogene and its cellular homolog, c-Rel, are members of a family of transcription factors that include the two subunits of the transcription factor NF $\kappa$ B (p50 and p65) and the *Drosophila* maternal morphogen, dorsal. Both proteins specifically bind to DNA sequences that are the same or slight variations of the 10 bp  $\kappa$ B sequence in the immunoglobulin  $\kappa$  light chain enhancer. This same sequence is also present in a number of other cellular and viral enhancers. The DNA binding activity of NF $\kappa$ B is activated and rapidly transported from the cytoplasm to the nucleus in cells exposed to mitogens or growth factors. cDNAs encoding precursors for two distinct proteins of the same size have been described, designated p105 and p100, respectively. The p105 precursor contains p50 at its amino-terminus and a C-terminal region that, when expressed as a separate molecule, designated pdI, binds to p50 and regulates its activity.

# CHROMOSOMAL LOCATION

Genetic locus: RELA (human) mapping to 11q13.1; Rela (mouse) mapping to 19 A.

#### SOURCE

 $NF_KB$  p65 (4H211) is a mouse monoclonal antibody raised against amino acids 526-539 of  $NF_KB$  p65 of human origin.

# **PRODUCT**

Each vial contains 100  $\mu g \; lg G_1$  in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

# **APPLICATIONS**

NF $\kappa$ B p65 (4H211) is recommended for detection of NF $\kappa$ B p65 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for NF $\kappa$ B p65 siRNA (h): sc-29410, NF $\kappa$ B p65 siRNA (m): sc-29411, NF $\kappa$ B p65 shRNA Plasmid (h): sc-29410-SH, NF $\kappa$ B p65 shRNA Plasmid (m): sc-29411-SH, NF $\kappa$ B p65 shRNA (h) Lentiviral Particles: sc-29410-V and NF $\kappa$ B p65 shRNA (m) Lentiviral Particles: sc-29411-V.

Molecular Weight of NFκB p65: 65 kDa.

Positive Controls:  $NF_{\kappa}B$  p65 (m): 293T Lysate: sc-122027, Jurkat whole cell lysate: sc-2204 or K-562 whole cell lysate: sc-2203.

#### **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

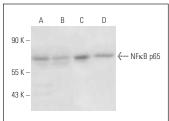
# **PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

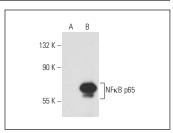
#### **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

### DATA







NFkB p65 (4H211): sc-71675. Western blot analysis of NFkB p65 expression in non-transfected: sc-117752 (**A**) and mouse NFkB p65 transfected: sc-122027 (**B**) 293T whole rell lysates

# **SELECT PRODUCT CITATIONS**

- Fontana, M.F., et al. 2011. Secreted bacterial effectors that inhibit host protein synthesis are critical for induction of the innate immune response to virulent *Legionella pneumophila*. PLoS Pathog. 7: e1001289.
- Johnson, J.L. and Gonzalez de Mejia, E. 2013. Interactions between dietary flavonoids apigenin or luteolin and chemotherapeutic drugs to potentiate anti-proliferative effect on human pancreatic cancer cells, in vitro. Food Chem. Toxicol. 60: 83-91.
- Kim, J.E., et al. 2014. Paclitaxel-exposed ovarian cancer cells induce cancer-specific CD4+ T cells after doxorubicin exposure through regulation of MyD88 expression. Int. J. Oncol. 44: 1716-1726.
- Lee, J.K., et al. 2015. Effect of regular exercise on inflammation induced by drug-resistant *Staphylococcus aureus* 3089 in ICR mice. Sci. Rep. 5: 16364.
- 5. Hong, H., et al. 2017. CDK7 inhibition suppresses rheumatoid arthritis inflammation via blockage of NF $\kappa$ B activation and IL-1 $\beta$ /IL-6 secretion. J. Cell. Mol. Med. 22: 1292-1301.
- Yin, X., et al. 2018. Diallyl disulfide inhibits the metastasis of type II esophageal-gastric junction adenocarcinoma cells via NFκB and PI3K/AKT signaling pathways *in vitro*. Oncol. Rep. 39: 784-794.
- 7. Lei, J.R., et al. 2019. Resveratrol downregulates the TLR4 signaling pathway to reduce brain damage in a rat model of focal cerebral ischemia. Exp. Ther. Med. 17: 3215-3221.
- 8. Li, M., et al. 2020. miR-218 regulates diabetic nephropathy via targeting IKK- $\beta$  and modulating NK $\kappa$ B-mediated inflammation. J. Cell. Physiol. 235: 3362-3371.



See **NF\kappaB p65 (F-6): sc-8008** for NF $\kappa$ B p65 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor<sup>®</sup> 488, 546, 594, 647, 680 and 790.