SANTA CRUZ BIOTECHNOLOGY, INC.

NFκB p65 (4H212): sc-71677



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 NKB (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 KB sequence in the immuno-globulin κ light chain enhancer. This same sequence is also present in a number of other cellular and viral enhancers. The DNA binding activity of NFKB is activated and NFKB is subsequently 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. The p105 precursor contains p50 at its N-terminus and a C-terminal region that when expressed as a separate molecule, designated pdl, binds to p50 and regulates its activity.

CHROMOSOMAL LOCATION

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

SOURCE

 $NF\kappa B$ p65 (4H212) is a mouse monoclonal antibody raised against amino acids 526-539 of $NF\kappa B$ p65 of human origin.

PRODUCT

Each vial contains 50 $\mu g~lgG_1$ in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

NF κ B p65 (4H211) is recommended for detection of NF κ 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 κ B p65 siRNA (h): sc-29410, NF κ B p65 siRNA (m): sc-29411, NF κ B p65 shRNA Plasmid (h): sc-29410-SH, NF κ B p65 shRNA Plasmid (m): sc-29411-SH, NF κ B p65 shRNA (h) Lentiviral Particles: sc-29410-V and NF κ B p65 shRNA (m) Lentiviral Particles: sc-29411-V.

Molecular Weight of NFkB p65: 65 kDa.

Positive Controls: NF κ 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





 $NF\kappa B$ p65 (4H212): sc-71677. Western blot analysis of $NF\kappa B$ p65 expression in K-562 (**A**), Jurkat (**B**), HUV-EC-C (**C**) and HeLa (**D**) whole cell lysates.

 $NF\kappa B$ p65 (4H212): sc-71677. Western blot analysis of $NF\kappa B$ p65 expression in non-transfected: sc-117752 (A) and mouse $NF\kappa B$ p65 transfected: sc-122027 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

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- Fu, X.D., et al. 2012. Dydrogesterone exerts endothelial anti-inflammatory actions decreasing expression of leukocyte adhesion molecules. Mol. Hum. Reprod. 18: 44-51.
- 3. Jia, C.H., et al. 2013. IKK- β mediates hydrogen peroxide induced cell death through p85 S6K1. Cell Death Differ. 20: 248-258.
- Eisfeld, A.K., et al. 2014. Intronic miR-3151 within BAALC drives leukemogenesis by deregulating the TP53 pathway. Sci. Signal. 7: ra36.
- Pandit, H., et al. 2015. Manganese superoxide dismutase expression is negatively associated with microRNA-301a in human pancreatic ductal adenocarcinoma. Cancer Gene Ther. 22: 481-486.
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- Li, W., et al. 2019. MicroRNA-451 relieves inflammation in cerebral ischemia-reperfusion via the Toll-like receptor 4/MyD88/NFκB signaling pathway. Mol. Med. Rep. 20: 3043-3054.
- Jang, H.R., et al. 2021. PLK1/vimentin signaling facilitates immune escape by recruiting Smad2/3 to PD-L1 promoter in metastatic lung adenocarcinoma. Cell Death Differ. 28: 2745-2764.
- Xu, R., et al. 2023. Invasive FoxM1 phosphorylated by PLK1 induces the polarization of tumor-associated macrophages to promote immune escape and metastasis, amplified by IFITM1. J. Exp. Clin. Cancer Res. 42: 302.



See NF κ B p65 (F-6): sc-8008 for NF κ B p65 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor[®] 488, 546, 594, 647, 680 and 790.