

NFκB p65 (F-6): sc-8008

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 NFκB (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 κB sequence in the immunoglobulin κ light chain enhancer. This same sequence is also present in a number of other cellular and viral enhancers. The DNA binding activity of NFκB 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 have been described, designated p105 and p100. 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.

REFERENCES

- Meyer, R., et al. 1991. Cloning of the DNA-binding subunit of human nuclear factor κB: the level of its mRNA is strongly regulated by phorbol ester or tumor necrosis factor α. Proc. Natl. Acad. Sci. USA 88: 966-970.
- Schmid, R.M., et al. 1991. Cloning of an NFκB subunit which stimulates HIV transcription in synergy with p65. Nature 352: 733-736.

CHROMOSOMAL LOCATION

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

SOURCE

NFκB p65 (F-6) is a mouse monoclonal antibody raised against amino acids 1-286 of NFκB p65 of human origin.

PRODUCT

Each vial contains 200 μg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-8008 X, 200 μg/0.1 ml.

NFκB p65 (F-6) is available conjugated to agarose (sc-8008 AC), 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-8008 HRP), 200 μg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-8008 PE), fluorescein (sc-8008 FITC), Alexa Fluor[®] 488 (sc-8008 AF488), Alexa Fluor[®] 546 (sc-8008 AF546), Alexa Fluor[®] 594 (sc-8008 AF594) or Alexa Fluor[®] 647 (sc-8008 AF647), 200 μg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-8008 AF680) or Alexa Fluor[®] 790 (sc-8008 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

In addition, NFκB p65 (F-6) is available conjugated to biotin (sc-8008 B), 200 μg/ml, for WB, IHC(P) and ELISA; and to either TRITC (sc-8008 TRITC, 200 μg/ml), PerCP (sc-8008 PerCP), PerCP-Cy5.5 (sc-8008 PCPC5) or Alexa Fluor[®] 405 (sc-8008 AF405), 100 tests in 2 ml, for IF, IHC(P) and FCM.

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STORAGE

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

APPLICATIONS

NFκB p65 (F-6) is recommended for detection of NFκB p65 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500), flow cytometry (1 μg per 1 x 10⁶ cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

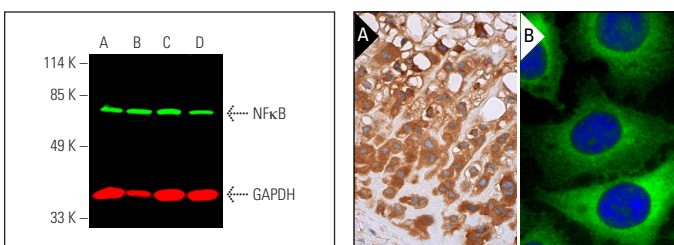
Suitable for use as control antibody for NFκB p65 siRNA (h): sc-29410, NFκB p65 siRNA (m): sc-29411, NFκB p65 siRNA (r): sc-61876, NFκB p65 shRNA Plasmid (h): sc-29410-SH, NFκB p65 shRNA Plasmid (m): sc-29411-SH, NFκB p65 shRNA Plasmid (r): sc-61876-SH, NFκB p65 shRNA (h) Lentiviral Particles: sc-29410-V, NFκB p65 shRNA (m) Lentiviral Particles: sc-29411-V and NFκB p65 shRNA (r) Lentiviral Particles: sc-61876-V.

NFκB p65 (F-6) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of NFκB p65: 65 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, MIA PaCa-2 cell lysate: sc-2285 or THP-1 cell lysate: sc-2238.

DATA



Simultaneous direct near-infrared western blot analysis of NFκB p65 expression, detected with NFκB p65 (F-6) Alexa Fluor[®] 680: sc-8008 AF680 and GAPDH expression, detected with GAPDH (0411) Alexa Fluor[®] 790: sc-47724 AF790 in Jurkat (A), THP-1 (B), T24 (C) and MIA PaCa-2 (D) whole cell lysates. Blocked with UltraCruz[®] Blocking Reagent: sc-516214.

NFκB p65 (F-6): sc-8008. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing cytoplasmic staining of decidual cells (A). NFκB p65 (F-6) Alexa Fluor[®] 488: sc-8008 AF488. Direct immunofluorescence staining of formalin-fixed HeLa cells showing cytoplasmic and nuclear (green) and nuclear DAPI counterstain (blue) localization (B).

SELECT PRODUCT CITATIONS

- Young, J.L., et al. 1969. Secretion of sodium and potassium by the parotid gland in essential hypertension. South. Med. J. 62: 468-470.
- Maturu, P., et al. 2018. Quercetin attenuates the hyperoxic lung injury in neonatal mice: implications for bronchopulmonary dysplasia (BPD). Food Chem. Toxicol. 114: 23-33.
- Jeong, H.J., et al. 2018. Molecular mechanisms of anti-inflammatory effect of chrysophanol, an active component of AST2017-01 on atopic dermatitis *in vitro* models. Int. Immunopharmacol. 54: 238-244.

RESEARCH USE

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