

# 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 NκB (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 NFκB 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

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 IgG<sub>1</sub> 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<sup>®</sup> 488 (sc-8008 AF488), Alexa Fluor<sup>®</sup> 546 (sc-8008 AF546), Alexa Fluor<sup>®</sup> 594 (sc-8008 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-8008 AF647), 200 μg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-8008 AF680) or Alexa Fluor<sup>®</sup> 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 or Alexa Fluor<sup>®</sup> 405 (sc-8008 AF405, 200 μg/ml), 100 tests in 2 ml, for IF, IHC(P) and FCM.

Alexa Fluor<sup>®</sup> is a trademark of Molecular Probes, Inc., Oregon, USA

## 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](http://www.scbt.com) for detailed protocols and support products.

## 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 10<sup>6</sup> cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

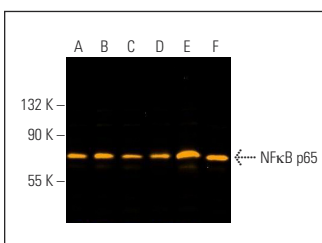
Suitable for use as control antibody for NFκB p65 siRNA (h): sc-29410, NFκB p65 siRNA (m): sc-29411, NFκB p65 siRNA (r): sc-61876, NFκB p65 shRNA Plasmid (h): sc-29410-SH, NFκB p65 shRNA Plasmid (m): sc-29411-SH, NFκB p65 shRNA Plasmid (r): sc-61876-SH, NFκB p65 shRNA (h) Lentiviral Particles: sc-29410-V,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

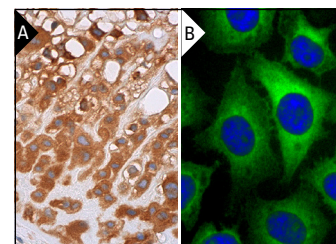
Molecular Weight of NFκB p65: 65 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, T24 cell lysate: sc-2292 or THP-1 cell lysate: sc-2238.

## DATA



NFκB p65 (F-6) Alexa Fluor<sup>®</sup> 594: sc-8008 AF594. Direct fluorescent western blot analysis of NFκB p65 expression in THP-1 (A), K-562 (B), MOLT-4 (C), Jurkat (D), T24 (E) and HUV-EC-C (F) whole cell lysates. Blocked with UltraCruz<sup>®</sup> 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<sup>®</sup> 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

- Lee, K.Y., et al. 1999. PG490 (triptolide) cooperates with tumor necrosis factor-α to induce apoptosis in tumor cells. *J. Biol. Chem.* 274: 13451-13455.
- Abosrea, A.M., et al. 2023. The potential role of pumpkin seeds oil on methotrexate-induced lung toxicity. *Sci. Rep.* 13: 7321.
- Ardizzone, A., et al. 2024. Rebalancing NOX2/Nrf2 to limit inflammation and oxidative stress across gut-brain axis in migraine. *Free Radic. Biol. Med.* 213: 65-78.

## RESEARCH USE

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