SANTA CRUZ BIOTECHNOLOGY, INC.

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 NF κ 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 κ B 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 NF κ 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 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.

CHROMOSOMAL LOCATION

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

SOURCE

 $NF\kappa B$ p65 (F-6) is a mouse monoclonal antibody raised against amino acids 1-286 of $NF\kappa B$ p65 of human origin.

PRODUCT

Each vial contains 200 $\mu g~lg G_1$ 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 $\mu g/0.1$ 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, NF κ B p65 (F-6) is available conjugated to biotin (sc-8008 B), 200 μ g/ml, for WB, IHC(P) and ELISA; and to either TRITC (sc-8008 TRITC, 200 μ g/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.

Alexa Fluor® 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 for detailed protocols and support products.

APPLICATIONS

NF κ B p65 (F-6) 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), 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).

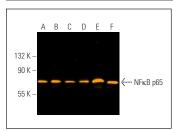
Suitable for use as control antibody for NF κ B p65 siRNA (h): sc-29410, NF κ B p65 siRNA (m): sc-29411, NF κ B p65 siRNA (r): sc-61876, NF κ B p65 shRNA Plasmid (h): sc-29410-SH, NF κ B p65 shRNA Plasmid (m): sc-29411-SH, NF κ B p65 shRNA Plasmid (r): sc-61876-SH, NF κ B p65 shRNA (h) Lentiviral Particles: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

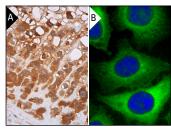
 $\mathsf{NF}\kappa\mathsf{B}$ p65 (F-6) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of NFkB 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





NFkB p65 (F-6) Alexa Fluor® 594: sc-8008 AF594. Direct fluorescent western blot analysis of NFkB 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® Blocking Reagent: sc-516214. NFkB p65 (F-6): sc-8008. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing cytoplasmic staining of decidual cells (A). NFkB 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

- 1. 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.