

Purified anti-NF-κB p65 Antibody

Catalog# / Size	653001 / 25 µg 653002 / 100 µg
Clone	14G10A21
Regulatory Status	RUO
Other Names	Nuclear factor NF-kappa-B p65 subunit (NF-κB p65), Rel-A, transcription factor p65, Nuclear factor of kappa light polypeptide gene enhancer in B-cells 3 (NFKB3)
Isotype	Mouse IgG2b, κ
Description	NF-κB p65 is a member of REL-like domain containing protein family, which forms a NF-κB complex with the other family members: NF-κB1 (p105/p50) or NF-κB2 (p100/p52). The NF-κB complex is inactivated and held in the cytoplasm by the NF-κB inhibitor IκB. In response to activation stimuli, IκB kinases (IKKs) phosphorylates IκB, resulting in degradation of IκB and liberation of NF-κB complex. The activated NF-κB complex translocates to the nucleus and binds to κB sites in the DNA of their target genes.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Partial human NF-κB p65 recombinant protein (451-551 aa)
Formulation	This antibody is provided in phosphate-buffered solution, pH 7.2, containing 0.05% sodium azide.
Concentration	0.5 mg/ml
Storage & Handling	Upon receipt, store undiluted between 2°C and 8°C.
Application	WB - Quality tested IP, KO/KD-WB - Verified
Recommended Usage	Each lot of this antibody is quality control tested by Western blotting . For Western blotting, the suggested use of this reagent is 0.1-1.0 µg per ml. For immunoprecipitation, the suggested use of this reagent is 2-10 µg per ml. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	This clone is not recommended for ChIP (Chromatin Immunoprecipitation) assays (as determined by in-house testing).
Product Citations	1. De Maeyer RPH, <i>et al.</i> 2020. Nat Immunol. 21:615. PubMed
RRID	AB_2561612 (BioLegend Cat. No. 653001) AB_2561613 (BioLegend Cat. No. 653002)

Antigen Details

Structure	65 kD protein containing a Rel homology domain (RHD), an activation domain, and a 9aaTAD domain.
Distribution	The inactivated NF-κB complex containing p65 subunit is bound to IκB and is localized to cytoplasm. Upon activation, IκB is phosphorylated and degraded. The activated NF-κB complex is in turn translocated to the nucleus as a transcription factor.
Function	NF-κB is a homodimeric or heterodimeric complex formed by the Rel-like domain-containing proteins. The most abundant form is p65 (RelA) - p50 (NF-κB1) heterodimer complex. The NF-κB

complex is a ubiquitously expressed transcription factor which is involved in various biological functions, such as cell growth, tumorigenesis, differentiation, apoptosis, inflammation, and immune responses.

Interaction	Interacts with NF- κ B1 (p105/p50) or NF- κ B2 (p100/p52) to form heterodimeric NF- κ B complex. Interacts with HDAC1, HDAC3, and CBP. Interaction with MEN1 inhibits transactivation activity of NF- κ B complex.
Cell Type	B cells
Biology Area	Apoptosis/Tumor Suppressors/Cell Death, Cell Biology, Immunology, Neuroscience, Neuroscience Cell Markers, Signal Transduction, Transcription Factors
Molecular Family	Nuclear Markers
Antigen References	<ol style="list-style-type: none">1. Li Z, <i>et al.</i> 1997. <i>Mol. Cell. Biol.</i> 17:6184.2. Sacconi S, <i>et al.</i> 2004. <i>J. Exp. Med.</i> 200:107.3. Nolan GP, <i>et al.</i> 1991. <i>Cell</i> 64:961.4. Chen LF, <i>et al.</i> 2001. <i>Science</i> 293:1653.5. Hansen SK, <i>et al.</i> 1994. <i>Mol. Cell. Biol.</i> 14:2593.6. Chapman NR, <i>et al.</i> 2002. <i>Biochem J.</i> 366:459.
Gene ID	4790

Related Protocols

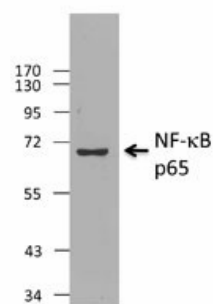
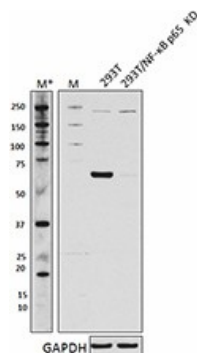
[Western Blotting Protocol](#)

[Immunoprecipitation Protocol](#)

Other Formats

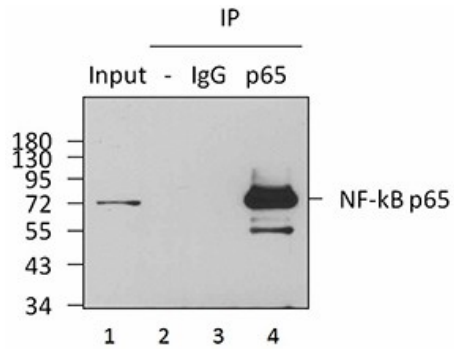
Purified anti-NF- κ B p65, PE anti-NF- κ B p65, APC anti-NF- κ B p65

Product Data



Total lysates (15 μ g protein) from 293T and 293T/NF- κ B p65 knockdown(KD) cells were resolved by electrophoresis (4-20% Tris-Glycine gel), transferred to nitrocellulose, and probed with 1:500 diluted (1 μ g/mL) purified anti-NF- κ B p65 antibody, clone 14G10A21 (upper) or 1:3000 diluted anti-GAPDH (poly6314) antibody (lower). Proteins were visualized by chemiluminescence detection using a 1:3000 diluted goat anti-mouse-IgG secondary antibody conjugated to HRP for the anti-NF- κ B p65 antibody, and a donkey anti-rabbit IgG Antibody conjugated to HRP for GAPDH. Lane M: Molecular weight ladder, M* indicates longer exposure.

HeLa cell extracts were resolved by electrophoresis, transferred to nitrocellulose, and probed with purified monoclonal anti-NF- κ B p65 (clone 14G10A21) antibody. Proteins were visualized using an anti-mouse-IgG secondary conjugated to HRP and chemiluminescence detection.



Immunoprecipitation of NF-κB p65 from HeLa cell extracts. Lane 1 is 5% input. Immunoprecipitation was performed using protein G resins only (lane 2), mouse IgG isotype control (lane 3), and anti-NF-κB p65 antibody (clone 14G10A21, lane 4). Western blot was performed using anti-NF-κB p65 antibody (clone 14G10A21).

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