



NFκB p65

Mouse monoclonal Antibody

#54003

Catalog Number: 54003

Amount: 100µg/100µl

Swiss-Prot No. :Q04206

Form of Antibody: Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.2% sodium azide, 50% glycerol

Storage/Stability: Store at -20°C/1 year

Immunogen: Purified recombinant human NFκB p65 protein fragments expressed in E.coli

Purification: affinity-chromatography

Specificity/Sensitivity: This antibody detects endogenous levels of NFκB p65 and does not cross-react with related proteins

Reactivity: Human, Mouse

Applications: Predicted MW: 65kd WB: 1:500-2000 IHC/IP: 1:50-200

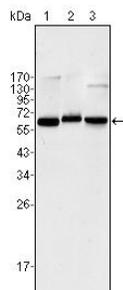


Figure 1: Western blot analysis using NF-κB p65 mouse mAb against Jurkat (1), K562 (2) and NIH/3T3 (3) cell lysate

Background: Transcription factors of the nuclear factor κ B (NF-κB)/Rel family is a ubiquitously expressed transcription factor that regulates many cytokine and Ig genes. It is involved in immune, inflammatory, viral, and acute phase responses. There are five family members in mammals: RelA (p65), c-Rel, RelB, NF-κB1 (p105/p50) and NF-κB2 (p100/p52). The most studied NF-κB complex consists of the p50 and p65 subunits, both containing a 300 amino acid region with homology to the Rel proto-oncogene product. The p50 subunit binds DNA, whereas the p65 subunit is responsible for the interaction of NF-κB with its inhibitor, IκB. In most cell types, the p50/p65 heterodimer is located within the cytoplasm complexed to IκB. This complex prevents nuclear translocation and activity of NF-κB. In response to stimuli such as cytokines, LPS, and viral infections, IκB is phosphorylated at critical residues. This phosphorylation induces dissociation of the IκB/NF-κB complex, allowing the free heterodimeric NF-κB to form a heterotetramer that translocates to the nucleus. In the nucleus, it binds to the κB site within promoters and enhancers and functions as a transcriptional activator.