Phospho-NF-κB p65 (Ser536) (93H1) Rabbit mAb (Alexa Fluor® 488 Conjugate)

**Description:** Cell Signaling Technology Antibody conjugated to Alexa Fluor® 488 fluorescent dye and tested in-house for direct Flow Cytometric analysis of human cells. The antibody is expected to exhibit the same species cross-reactivity as the unconjugated Phospho-NF-κB p65 (Ser536) (93H1) Rabbit mAb #3033.

**Background:** Transcription factors of the nuclear factor κB (NF-κB)/Rel family play a pivotal role in inflammatory and immune responses (1,2). There are five family members in mammals: RelA, c-Rel, RelB, NF-κB1 (p105/p50) and NF-κB2 (p100/p52). Both p105 and p100 are proteolytically processed by the proteasome to produce p50 and p52, respectively. The p50 and p52 products form dimeric complexes with Rel proteins, which are then able to bind DNA and regulate transcription. In unstimulated cells, NF-κB is sequestered in the cytoplasm by its inhibitory proteins, the IκB's (3-5). NF-κB-activating agents can induce the phosphorylation of IκB's, targeting them for rapid degradation through an ubiquitin-proteasome pathway, releasing NF-κB to enter the nucleus, where it regulates gene expression (6-8). NIK and IKKα regulate the phosphorylation and processing of NF-κB (p100) to produce p52, which is then translocated to the nucleus (9-11).

**Background References:**

**Applications Key:** W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E—ELISA-Peptide

**Species Cross-Reactivity Key:** H—human M—mouse R—rat Mm—mink Mb—mole MI—minke C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine

**Storage:** Supplied in PBS (pH 7.2), less than 0.1% sodium azide, 2 mg/ml BSA. Store at 4°C. Protect from light. Do not freeze.

**Recommended Antibody Dilutions:**
Flow Cytometry 1:50

**For application specific protocols please see the web page for this product at www.cellsignal.com.**