NFκB p65 phospho Ser536 antibody (pAb)

Catalog Nos: 39675, 39676
RRID: AB_2793300
Isotype: Serum
Application(s): WB
Reactivity: Human

Volumes: 100 µl, 10 µl
Purification: None
Host: Rabbit
Molecular Weight: 65 kDa

Background: NFκB p65 (Nuclear factor NF-kappa-B p65 subunit also known as NFκB p65 or RelA) is a member of the Rel family of transcription factors that are involved in processes such as inflammation, immunity, differentiation, cell growth, tumorigenesis and apoptosis. The Rel family includes c-Rel, RelA (NFκB p65, NFκB3) and RelB (I-Rel). Rel proteins form dimers with the NFκB p50 (proteolytically processed from p105/NFκB1) and p52 (proteolytically processed from p100/NFκB2) members of the NFκB family that bind DNA and activate transcription. The NFκB p65/p50 heterodimer is the most abundant form of NFκB.

NFκB signaling is negatively regulated by the sequestration of the NFκB complex in the cytoplasm by its association with the IκB family of inhibitory proteins. The IκB Kinase (IKK) complex is the key enzyme involved in the activation and translocation of NFκB. The IKK complex is composed of two catalytic subunits (IKKα and IKKβ) and a regulatory subunit (IKKγ). Upon its activation, the IKK complex phosphorylates IκB proteins (IκBα, IκBα phospho Ser32, 36), which marks them for ubiquitination and degradation. This enables the NFκB complex to translocate to the nucleus where it regulates transcription by binding to DNA.

Phosphorylation at serine 536 stimulates acetylation at lysine 310 and interaction with the acetyltransferase CBP. The phosphorylated and acetylated forms show enhanced transcriptional activity.

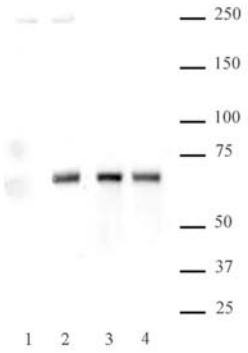
Immunogen: This NFkB p65 phospho Ser536 antibody was raised against a peptide containing phospho-serine 536 of human NFkB p65.

Buffer: Rabbit serum containing 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

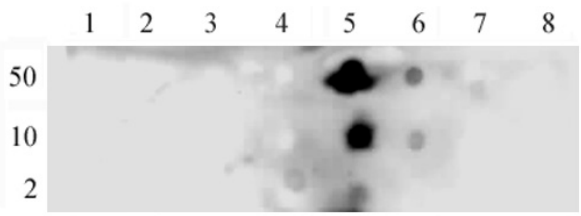
Application Notes:
Applications Validated by Active Motif:
WB: 1:500 - 1:1,000 dilution

Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



NFκB p65 phospho Ser536 pAb tested by Western blot.
HeLa cell extract (20 µg per lane) probed with either NFκB p65 phospho Ser536 pAb (Lanes 1 and 2, 1:500 dilution) or with NFκB p65 pAb (Catalog No. 39369, Lanes 3 and 4, 1:5,000 dilution). Lanes 1 and 3: extracts derived from untreated cells. Lanes 2 and 4: extracts derived from cells treated with TNF-α and Calyculin.



NFκB p65 phospho Ser536 pAb tested by dot blot analysis.
Dot blot analysis was used to confirm the specificity of of NFκB p65 phospho Ser536 pAb for NFκB p65 phosphorylated at serine 536. Phosphorylated peptides corresponding to the immunogen and related peptides were spotted onto PVDF and probed with NFκB p65 phospho Ser536 pAb at 1:10,000. The amount of peptide (picomoles) spotted is indicated next to each row.

Lane 1: phospho Ser276 NFκB p65 peptide.
Lane 2: unmodified peptide surrounding Ser276 NFκB p65 peptide.
Lane 3: phospho Ser529 NFκB p65 peptide.
Lane 4: unmodified peptide surrounding Ser529 NFκB p65.
Lane 5: phospho Ser536 NFκB p65 peptide.