Revision 3

Store at -20C

#4808

Phospho-NF-κB p105 (Ser932) (178F3) Rabbit mAb

Cell Signaling TECHNOLOGY®

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
IHC-P	H	Endogenous	105	Rabbit IgG	#P19838	4790

Product Usage Information

Application	Dilution
Immunohistochemistry (Paraffin)	1:150

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.

For a carrier free (BSA and azide free) version of this product see product #41317.

Specificity/Sensitivity

Phospho-NF-kappaB p105 (Ser932) (178F3) Rabbit mAb detects endogenous levels of p105NF-kappaB only when phosphorylated at serine 932.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic phosphopeptide corresponding to amino acids around Ser932 of NF-kappaB p105.

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. Rel proteins bind p50 and p52 to form dimeric complexes that bind DNA and regulate transcription. In unstimulated cells, NF-κB is sequestered in the cytoplasm by IκB inhibitory proteins (3-5). NF-κB-activating agents can induce the phosphorylation of IκB proteins, targeting them for rapid degradation through the ubiquitin-proteasome pathway and releasing NF-κB to enter the nucleus where it regulates gene expression (6-8). NIK and IKKα (IKK1) regulate the phosphorylation and processing of NF-κB2 (p100) to produce p52, which translocates to the nucleus (9-11).

Following IKK-mediated phosphorylation of p105 NF-kappaB at multiple sites (Ser921, 923, 927 and 932) on its carboxy-terminus, SCFbeta-TrCP mediated processing produces the 50 kDa active form p50 (12,13).

Background References

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13. Orian, A. et al. (2000) *EMBO J* 19, 2580-91.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Applications Key

IHC-P: Immunohistochemistry (Paraffin)

Cross-Reactivity Key

H: Human

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