

#11930 Store at -20C

IKK α (3G12) Mouse mAb



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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:
WB, IF-IC	H Mk	Endogenous	85	Mouse IgG1	#O15111	1147

Product Usage Information

Application

Western Blotting
Immunofluorescence (Immunocytochemistry)

Dilution

1:1000
1:3200

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μ g/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 #49706.

Specificity / Sensitivity

IKK α (3G12) Mouse mAb recognizes endogenous levels of total IKK α protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a recombinant protein specific to a carboxy-terminal fragment of human IKK α protein.

Background

The NF- κ B/Rel transcription factors are present in the cytosol in an inactive state, complexed with the inhibitory I κ B proteins (1-3). Most agents that activate NF- κ B do so through a common pathway based on phosphorylation-induced, proteasome-mediated degradation of I κ B (3-7). The key regulatory step in this pathway involves activation of a high molecular weight I κ B kinase (IKK) complex whose catalysis is generally carried out by three tightly associated IKK subunits. IKK α and IKK β serve as the catalytic subunits of the kinase and IKK γ serves as the regulatory subunit (8,9). Activation of IKK depends upon phosphorylation at Ser177 and Ser181 in the activation loop of IKK β (Ser176 and Ser180 in IKK α), which causes conformational changes, resulting in kinase activation (10-13).

Background References

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7. Chen, Z.J. et al. (1996) *Cell* 84, 853-62.
8. Zandi, E. et al. (1997) *Cell* 91, 243-52.
9. Karin, M. (1999) *Oncogene* 18, 6867-74.
10. DiDonato, J.A. et al. (1997) *Nature* 388, 548-54.
11. Mercurio, F. et al. (1997) *Science* 278, 860-6.
12. Johnson, L.N. et al. (1996) *Cell* 85, 149-58.
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Species Reactivity

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

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

WB: Western Blotting **IF-IC:** Immunofluorescence (Immunocytochemistry)

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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