

IKK γ (h3): 293T Lysate: sc-170843

BACKGROUND

The transcription factor NF κ B is retained in the cytoplasm in an inactive form by the inhibitory protein I κ B. Activation of NF κ B requires that I κ B be phosphorylated on specific serine residues, which results in targeted degradation of I κ B. I κ B kinase α (IKK α), previously designated CHUK, interacts with I κ B α and specifically phosphorylates I κ B α on Serine 32 and 36, the sites that trigger its degradation. IKK α appears to be critical for NF κ B activation in response to proinflammatory cytokines. Phosphorylation of I κ B by IKK α is stimulated by the NF κ B inducing kinase (NIK), which itself is a central regulator for NF κ B activation in response to TNF and IL-1. The functional IKK complex contains three subunits, IKK α , IKK β and IKK γ (also designated NEMO), and each appear to make essential contributions to I κ B phosphorylation.

REFERENCES

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- Zandi, E., et al. 1997. The I κ B kinase complex (IKK) contains two kinase subunits, IKK α and IKK β , necessary for I κ B phosphorylation and NF κ B activation. *Cell* 91: 243-252.
- Song, H.Y., et al. 1997. Tumor necrosis factor (TNF)-mediated kinase cascades: bifurcation of nuclear factor- κ B and c-jun N-terminal kinase (JNK/SAPK) pathways at TNF receptor-associated factor 2. *Proc. Natl. Acad. Sci. USA* 94: 9792-9296.
- Yamaoka, S., et al. 1998. Complementation cloning of NEMO, a component of the I κ B kinase complex essential for NF κ B activation. *Cell* 93: 1231-1240.

CHROMOSOMAL LOCATION

Genetic locus: IKBKG (human) mapping to Xq28.

PRODUCT

IKK γ (h3): 293T Lysate represents a lysate of human IKK γ transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

IKK γ (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive IKK γ antibodies. Recommended use: 10-20 μ l per lane.

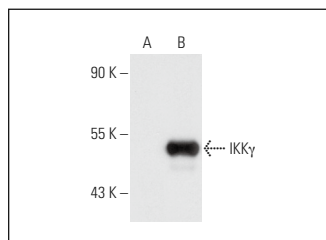
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

IKK γ (B-10): sc-166700 is recommended as a positive control antibody for Western Blot analysis of enhanced human IKK γ expression in IKK γ transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

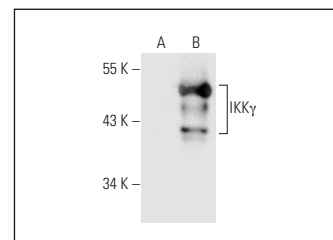
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



IKK γ (B-10): sc-166700. Western blot analysis of IKK γ expression in non-transfected: sc-117752 (A) and human IKK γ transfected: sc-170843 (B) 293T whole cell lysates.



IKK γ (F-12): sc-166397. Western blot analysis of IKK γ expression in non-transfected: sc-117752 (A) and human IKK γ transfected: sc-170843 (B) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.