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# IKK $\gamma$ (m): 293T Lysate: sc-121029

## BACKGROUND

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

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: Ikbkg (mouse) mapping to X A7.3.

## PRODUCT

IKK $\gamma$  (m): 293T Lysate represents a lysate of mouse IKK $\gamma$  transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## APPLICATIONS

IKK $\gamma$  (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive IKK $\gamma$  antibodies. Recommended use: 10-20  $\mu$ l per lane.

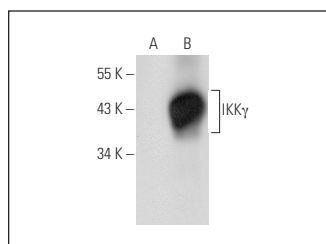
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

IKK $\gamma$  (F-10): sc-166398 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse IKK $\gamma$  expression in IKK $\gamma$  transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

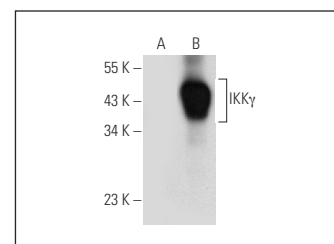
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:  
 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  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 $\gamma$  (F-10): sc-166398. Western blot analysis of IKK $\gamma$  expression in non-transfected: sc-117752 (A) and mouse IKK $\gamma$  transfected: sc-121029 (B) 293T whole cell lysates.



IKK $\gamma$  (F-12): sc-166397. Western blot analysis of IKK $\gamma$  expression in non-transfected: sc-117752 (A) and mouse IKK $\gamma$  transfected: sc-121029 (B) 293T whole cell lysates.

## 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.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.