

## IKK $\gamma$ (NEMO) Polyclonal Antibody

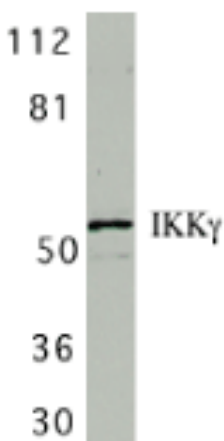
| Product Specifications  |  |
|---|--|
| <b>Catalog Number:</b>  | KAP-TF132  |
| <b>Host:</b>  | Rabbit   |
| <b>Species Reactivity:</b>  | Human, mouse, and rat  |
| <b>Applications:</b><br><i>The optimal dilution for a specific application must be determined by the investigator</i> | <b>WB:</b> 0.5 to 1 $\mu$ g/mL   |
| <b>Predicted m.w.:</b>  | ~52 kDa  |
| <b>Concentration:</b>   | See product label  |
| <b>Purification:</b>  | Peptide Affinity   |
| <b>Format:</b>  | PBS, 0.02% sodium azide  |
| <b>Storage:</b><br><i>Shipping conditions may differ from the recommended storage temperature</i>                     | Store at 4°C   |
| <b>Immunogen:</b>   | Synthetic peptide derived from the sequence of human IKK $\gamma$ <sup>7-8</sup> , conjugated to KLH; sequence identical to mouse <sup>8</sup> |
| <b>Related Products:</b>  |  |
| KAP-TF118   | IKK $\beta$ Polyclonal Antibody  |
| KAP-TF131   | IKK $\epsilon$ Polyclonal Antibody   |
| CSA-507   | CIKS (Act1) Polyclonal Antibody  |
| 905-242   | RIP3 Polyclonal Antibody   |

### Background:

Ubiquitous transcription factor Nuclear factor kappa B (NF $\kappa$ B) mediates the expression of a great variety of genes in response to extracellular stimuli during activation of immune and inflammatory responses<sup>1-4</sup>. Inactive NF $\kappa$ B is typically sequestered in the cytosol in complex with I $\kappa$ B proteins which inhibit its transcriptional activity. NF $\kappa$ B activation is triggered by phosphorylation-dependent degradation of I $\kappa$ B proteins which is mediated by an I $\kappa$ B kinase (IKK) regulatory complex, allowing NF $\kappa$ B dimers to enter the nucleus and initiate transcription of immunoresponsive genes encoding cytokines, chemokines, cell adhesion molecules, and metabolic enzymes. IKK $\gamma$ /NEMO is a nonenzymatic subunit of the IKK regulatory complex which, along with the catalytic subunits IKK $\alpha$  and IKK $\beta$ , mediates the response to inflammatory signals such as TNF- $\alpha$ , IL-1 $\beta$ , virus infection, and toll-like receptor and antigen receptor activation. NEMO/IKK $\gamma$  contains several coiled-coil domains, a leucine zipper and a C-terminal zinc finger domain which collectively coordinate both IKK assembly and the recruitment of upstream signaling and adaptor proteins like RIP, TAX, CIKS/Act-1, TANK, and CARMA<sup>5-6</sup>.

#### References:

1. Luo, J.L., *et al.* (2005) J Clin Invest. **115**, 2625-2632.
2. Ghosh, S. and Karin, M. (2002) Cell **109**, S81-S96.
3. Karin, M. and Lin, A. (2002) **3**, 221-227.
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5. Yamaoka, S., *et al.* (1998) Cell **93**, 1231-1240.
6. Israil, A. (2000) Trends Cell Biol. **10**, 129-133.
7. Rothwarf, D.M., *et al.* (1998) Nature **395**, 297-300.
8. Yamaoka, S., *et al.* (1998) Cell **93**, 1231-1240.



Western blot analysis of HeLa whole cell lysate probed with IKK $\gamma$ /NEMO antibody at 1  $\mu$ g/mL