

# PRODUCT INFORMATION



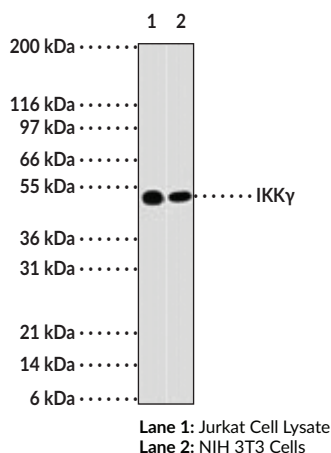
## IKK $\gamma$ Monoclonal Antibody (Clone 72C627)

Item No. 13931

### Overview and Properties

**Contents:** This vial contains 100  $\mu$ g of protein G-purified IgG.  
**Synonyms:** IKK3, NEMO, NF- $\kappa$ B Essential Modulator  
**Immunogen:** His-tagged full length human IKK $\gamma$   
**Species Reactivity:** (+) Human, mouse  
**Storage and Stability:**  $\leq 6$  months at 4°C;  $\geq 6$  months at -20°C  
**Storage Buffer:** 200  $\mu$ l PBS, containing 0.05% BSA and 0.05% sodium azide  
**Clone:** 72C627  
**Host:** Mouse  
**Isotype:** IgG<sub>1</sub>  
**Applications:** Western blot; the recommended starting concentration is 2  $\mu$ g/ml. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

### Image



**WARNING**  
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

**SAFETY DATA**  
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

**WARRANTY AND LIMITATION OF REMEDY**  
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## Description

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Nuclear Factor- $\kappa$ B (NF- $\kappa$ B) is sequestered in the cytoplasm by the I $\kappa$ B family of inhibitory proteins that mask the nuclear localization signal of NF- $\kappa$ B, thereby preventing translocation of NF- $\kappa$ B to the nucleus.<sup>1</sup> External stimuli such as tumor necrosis factor or other cytokines result in phosphorylation and degradation of I $\kappa$ B, releasing NF- $\kappa$ B dimers. NF- $\kappa$ B dimers subsequently translocate to the nucleus and activate target genes. Synthesis of I $\kappa$ B $\alpha$  is autoregulated.<sup>2</sup> I $\kappa$ B proteins are phosphorylated by I $\kappa$ B kinase complex consisting of at least three proteins, IKK1/ $\alpha$ , IKK2/ $\beta$ , and IKK3/ $\gamma$ .<sup>3-7</sup> IKK $\gamma$  preferentially interacts with IKK $\beta$  and is required for activation of IKK complex. IKK $\gamma$  is also known as NF- $\kappa$ B essential modulator (NEMO).<sup>7</sup> The human T cell leukemia virus type I Tax oncoprotein that activates NF- $\kappa$ B binds neither to IKK $\alpha$  nor IKK $\beta$ , but complexes directly with IKK $\gamma$ .<sup>8</sup> This suggests that IKK $\gamma$  may be a key molecule acting as an adapter for oncoprotein specific signaling to IKK $\alpha$  and IKK $\beta$ .<sup>8</sup>

## References

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