

IKK $\beta$  antibody (mAb)**Catalog No:** 40906**RRID:** AB\_2793429**Clone:** 10AG2**Application(s):** WB**Reactivity:** Human**Quantity:** 100  $\mu$ g**Purification:** Affinity Purified**Host:** Mouse**Isotype:** IgG1**Concentration:** 1  $\mu$ g/ $\mu$ l**Molecular Weight:** 87 kDa

**Background:** IKK $\beta$  (I $\kappa$ B Kinase beta subunit) – The I $\kappa$ B Kinase (IKK) complex is the key enzyme involved in the activation and translocation of NF $\kappa$ B (NF $\kappa$ B p50 & NF $\kappa$ B p65). The IKK complex is composed of two catalytic subunits (IKK $\alpha$  and IKK $\beta$ ) and a regulatory subunit (IKK $\gamma$ ).

NF $\kappa$ B signaling is negatively regulated by the sequestration of the NF $\kappa$ B complex in the cytoplasm by its association with the I $\kappa$ B family of inhibitory proteins. Upon its activation, the IKK complex phosphorylates I $\kappa$ B $\alpha$  at Ser32 and Ser36. This results ultimately in the degradation of I $\kappa$ B and the activation and nuclear translocation of NF $\kappa$ B. While both IKK- $\alpha$  and IKK- $\beta$  subunits are Ser/Thr kinases, IKK  $\beta$  appears to be the principal kinase, as IKK $\alpha$  is not required for activation of the IKK complex and the subsequent degradation of I $\kappa$ B $\alpha$ . Once activated, IKK $\beta$  autophosphorylates, which decreases IKK activity, thereby preventing a prolonged activation of inflammation.

**Immunogen:** This IKK $\beta$  antibody was raised against a 6xHis-Tag full-length protein corresponding to human IKK $\beta$ .

**Buffer:** PBS containing 0.02% sodium azide. Sodium azide is highly toxic.

**Application Notes:**

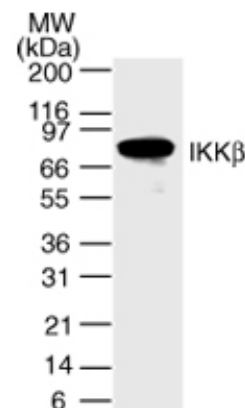
Applications Validated by Active Motif:

WB: 1 - 2  $\mu$ g/ml dilution

For optimal results, primary antibody incubations should be performed at room temperature. The addition of 0.1% Tween 20 to all blocking solutions may also reduce background. Individual optimization may be required.

**Storage and Guarantee:** Some products may be shipped at room temperature. This will not affect their stability or performance. Store at 4°C for short term. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.

**IKK $\beta$  mAb (Clone 10AG2) tested by Western blot.**

IKK $\beta$  detection by Western blot analysis. IKK $\beta$  can be detected in 30  $\mu$ g of Daudi whole-cell extract with IKK $\beta$  mAb (Clone 10AG2) at a 1  $\mu$ g/ml dilution.