

Catalog No. LF-MA0192

MONOCLONAL ANTIBODY



## Anti- I $\kappa$ B kinase $\beta$ (IKK $\beta$ ) (42D1)

**Background :** I $\kappa$ B kinase  $\beta$  (IKK $\beta$ ) is a component of a multiprotein kinase complex that regulates the activity of the transcription factor NF- $\kappa$ B. Activation of the IKK complex via upstream stimuli leads to phosphorylation and degradation of NF- $\kappa$ B bound I $\kappa$ B (Inhibitor of  $\kappa$ B). Subsequently, free NF- $\kappa$ B dimers enter the nucleus and regulate the transcription of a variety of target genes involved in cell proliferation and differentiation, apoptosis, and inflammation, etc. The IKK complex consists of 2 highly homologous kinase subunits, IKK $\alpha$  and IKK $\beta$ , and a nonenzymatic regulatory component, IKK $\gamma$ /NEMO. The relative contributions of IKK $\alpha$  and IKK $\beta$  to the signaling complex vary according to the requirements of the cell. IKK $\beta$  plays a predominant role in immune responses, while IKK $\alpha$  alone appears to be sufficient for at least some developmental systems. Recently, IKK/NF- $\kappa$ B signaling pathway was studied as therapeutic targets in cancer.

**Immunogen :** Recombinant human protein purified from *E.coli* (His-IKKbeta)

**Host :** Mouse

**Clone number :** 42D1

**Isotype :** IgG2b, k

**Size :** 100  $\mu$ l

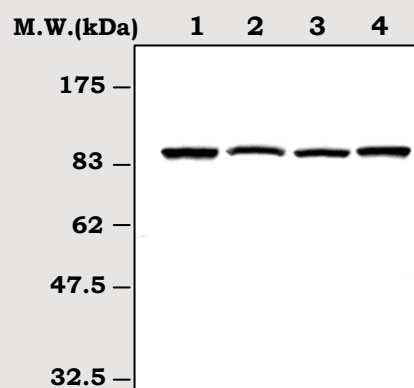
**Compositon :** Hepes with 0.15 M NaCl, 0.01% BSA, 0.03% sodium azide, and 50% glycerol

**Positive control :** K562 cell lysate

**Storage :** Store for 1 year at  $-20^{\circ}\text{C}$  from date of shipment

### Species cross reactivity

| Human | Mouse | Rat |
|-------|-------|-----|
| +     | +     | +   |



### Immunoblot Analysis of cell lysates

Lane 1 : K562 cell lysate  
Lane 2 : NIH3T3 cell lysate  
Lane 3 : C6 cell lysate  
Lane 4 : HeLa cell lysate

### Applications :

ELISA

Western blotting (1: 5,000)

Immunoprecipitation (2  $\mu$ l / 400  $\mu$ l cell lysates)

### Background Reference :

- 1) Kim H.J., et al., 2006, Cell Death Differ.13:738-747
- 2) Luo J.L. et al., 2005, J Clin Invest. 115:2625-2632
- 3) Clarkson R., 2002, Breast Cancer Res. 4:173-175
- 4) DiDonato J.A., 2001, Sci STKE. 2001(97):PE1

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