



## ***DB076: IκB- β (C20)***

### **Background:**

The NFκB family of transcription factors is sequestered in the cytoplasm by IκB inhibitory proteins (1&2). IκB-α and IκB-β are the two members of this family most often cited for their regulatory function of NFκB directed gene expression. The interaction of NFκB dimers with IκB proteins keeps the complex in the cytoplasm, but upon cellular stimulation the IκB proteins are phosphorylated and subsequently degraded (1&3). The free NFκB can now enter the nucleus and induce gene expression of proteins critical for cellular proliferation, differentiation, or apoptosis (1-4).

### **Origin:**

IκB-β (C20) is provided as an affinity purified rabbit polyclonal antibody, raised against a peptide mapping to the carboxy terminal domain of human IκB-β.

### **Product Details:**

Each vial contains 200 μg/ml of affinity purified rabbit IgG, IκB-β (C20) DB076, in 1 ml PBS containing 0.1 % sodium azide and 0.2% gelatin.

### **Competition Studies:**

A blocking peptide is also available, DB076P, for use in competition studies. Each vial contains 100 μg of peptide in 0.5 ml PBS with 0.1% sodium azide and 100 μg BSA.

### **Specificity:**

IκB-β (C20) is recommended to detect mouse, rat and human IκB-β by western blotting, immunoprecipitation, and immunohistochemistry. Recommended western blotting starting dilution 1:200.

### **Storage:**

Store this product at 4° C, do not freeze. The product is stable for one year from the date of shipment.

### **References:**

1. Schmitz ML, Baeuerle PA. 1995. Multi-step activation of NF-kappa B/Rel transcription factors. Immunobiology 193(2-4):116-127.
2. Tran K, Merika M, Thanos D. 1997. Distinct functional properties of IkappaB alpha and IkappaB beta. Mol Cell Biol 17(9):5386-5399.
3. Tanaka K, Kawakami T, Tateishi K, Yashiroda H, Chiba T. 2001. Control of IkappaBalpha proteolysis by the ubiquitin-proteasome pathway. Biochimie 83(3-4):351-356.
4. Chen CG, Malliaros J, Katerelos M, d'Apice AJ, Pearse MJ. Inhibition of NF-kappaB activation by a dominant-negative mutant of IkappaBalpha. Mol. Immunology 33(1):57-61.