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Product Information

IκBβ, GST-tagged, human recombinant, expressed in *E. coli* cells

Catalog Number **SRP5196**
Storage Temperature –70 °C

Synonyms: NFKBIB, TRIP9

Product Description

IκBβ is part of the NFκB complex and it inactivates NFκB complex by binding to it and trapping it in the cytoplasm. Phosphorylation of serine residues on IκBβ mediated by IκB kinases leads to its destruction via the ubiquitination pathway, thereby, allowing activation of the NFκB complex which translocates into the nucleus and binds DNA at kappa-B-binding motifs.[1] The PEST domain of IκBβ can interact with two proteins KBRAS1 and KBRAS2, and this interaction can decrease the rate of degradation IκBβ. IκBβ has been shown to participate in multiple signaling pathways including adipocytokine signaling pathway, B cell receptor signaling pathway, T cell receptor signaling pathway, and hypoxia.[2]

Recombinant, full-length, human IκBβ was expressed in *E. coli* cells using an N-terminal GST tag. The gene accession number is NM_002503. Recombinant protein stored in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 10 mM glutathione, 0.1 mM EDTA, 0.25 mM DTT, 0.1 mM PMSF, and 25% glycerol.

Molecular mass: ~56 kDa

Purity: 70–95% (SDS-PAGE, see Figure 1)

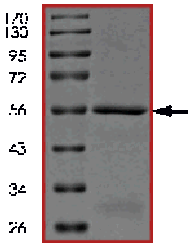
Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

The product ships on dry ice and storage at –70 °C is recommended. After opening, aliquot into smaller quantities and store at –70 °C. Avoid repeated handling and multiple freeze/thaw cycles.

Figure 1.
SDS-PAGE Gel of Typical Lot
70–95% (densitometry)



References

1. Fenwick, C. et al., A subclass of Ras proteins that regulate the degradation of I-kappa-B. Science, **287**, 869-873 (2000).
2. Hoffmann, A. et al., The I-kappa-B-NF-kappa-B signaling module: temporal control and selective gene activation. Science, **298**, 1241-1245 (2002)

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