

## Product Information

**Rel B, His tagged, human recombinant, expressed in Sf9 cells**

Catalog Number **SRP5125**  
Storage Temperature  $-70^{\circ}\text{C}$

Synonyms: IREL, I-REL

### Product Description

Rel B is part of the NF $\kappa$ B complex and forms heterodimeric complexes with p50 (NF $\kappa$ B1) and p52 (NF $\kappa$ B2).<sup>1</sup> The homodimeric complexes of Rel B alone do not show DNA-binding activity. IHC analysis has shown Rel B expression correlated with dendritic cell activation. NF $\kappa$ B-inducing kinase NIK is required for osteoclastogenesis in response to pathologic stimuli and overexpression of Rel B rescues differentiation of mouse NIK  $-/-$  osteoclast precursors. Rel B is required for RANKL-induced osteoclastogenesis *in vitro* and for TNF  $\alpha$ -induced bone resorption *in vivo*. This indicates the alternative NF $\kappa$ B pathway, via Rel B, plays an essential and unique role in RANKL signaling toward osteoclast development.<sup>2</sup>

Recombinant, full-length, human Rel B was expressed by baculovirus in Sf9 insect cells using an N-terminal His tag. The gene accession number is NM\_006509. Recombinant protein stored in 50 mM sodium phosphate, pH 7.0, 300 mM NaCl, 150 mM imidazole, 0.1 mM PMSF, 0.25 mM DTT, and 25% glycerol.

Molecular mass: ~68 kDa

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

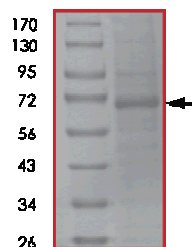
### Precautions and Disclaimer

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  $-70^{\circ}\text{C}$  is recommended. After opening, aliquot into smaller quantities and store at  $-70^{\circ}\text{C}$ . Avoid repeated handling and multiple freeze/thaw cycles.

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



### References

1. Bours, V., et al., Human RelB (I-Rel) functions as a kappa-B site-dependent transactivating member of the family of Rel-related proteins. *Oncogene*, **9**, 1699-1702 (1994).
2. Vaira, S., et al., RelB is the NF-kappa-B subunit downstream of NIK responsible for osteoclast differentiation. *Proc. Nat. Acad. Sci.*, **105**, 3897-3902 (2008).

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