Recombinant RELB protein (His tag)

Catalog Number	537942
Synonyms	I-Rel
Species	Human
Expression System	E. coli
Accession	Q01201
Molecular Weight	Predictes a molecular mass of 34.85 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 37 kDa band.

Product Information

Sequence Region	123-413
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 123-413 aa (Q01201) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	This product is a recombinant fragment of the human Transcription factor RelB (I-Rel), spanning residues 123-413, designed for structural and biochemical studies. This 291-amino acid fragment was computationally selected to ensure stability and solubility, making it an ideal tool for investigating the functional mechanisms of RelB in NF-kappa-B signaling pathways. Transcription factor RelB, encoded by the RELB gene in Homo sapiens, is a key component of the NF-kappa-B transcription factor family, which regulates critical biological processes including inflammation, immunity, cell growth, and apoptosis. RelB forms heterodimeric complexes with NFKB1/p50 or NFKB2/p52, acting as transcriptional activators that bind kappa-B DNA sites to modulate gene expression. It is involved in T and B lymphocyte maturation, resistance to cell stress in pancreatic ductal adenocarcinoma, and repression of the CLOCK-BMAL1 heterodimer in circadian regulation. Subcellularly, RelB localizes to the nucleus and the centrosome in the cytoplasm, where it associates with the cytoskeleton and microtubule organizing center. The full-length protein's activity is regulated through interactions with inhibitory proteins and post-translational modifications, highlighting its significance in cellular signaling and disease contexts.