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NFKBIA
Recombinant Human NF-kappa-B inhibitor alpha (His Tag)

Catalog No.	CRH663A-His CRH663B-His	**Quantity:**	20 µg 50 µg

Alternate Names: NF-kappa-B inhibitor alpha, I-kappa-B-alpha, IkB-alpha, IkappaBalpha, Major histocompatibility complex enhancer-binding protein MAD3

Description: Nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor is a member of the NF-kappa-B inhibitor family that functions to inhibit the NF-kB transcription factor by masking the nuclear localization signals (NLS) of NF-kB proteins and keeping them sequestered in an inactive state in the cytoplasm. In addition, NFKBIA blocks the ability of NF-κB transcription factors to bind to DNA, which is required for NF-kB's proper functioning. Signal-induced degradation of I kappa B alpha exposes the nuclear localization signal of NF-kappa B, thus allowing it to translocate into the nucleus and activate transcription from responsive genes. Deletion of NFKBIA has an effect that is similar to the effect of EGFR amplification in the pathogenesis of glioblastoma and is associated with comparatively short survival. Polymorphisms in NFKBIA may be important in pre-disposition to and outcome after treatment, of multiple myeloma (MM). The NFKBIA gene product, IkappaBalpha, binds to NF-kappaB preventing its activation and is important in mediating resistance to apoptosis in B-cell lymphoproliferative diseases.

UniProt ID: P25963

Accession Number: NP_065390.1

Protein Construction: A DNA sequence encoding the human NFKBIA (Phe 2-Leu 317) was expressed, with a polyhistide tag at the N-terminus.

Source: E. coli

Formulation: Lyophilized from sterile 50mM Tris, 0.5M NaCl, pH 8.0
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.

Molecular Weight: The rhNFKBIA consists of 323 amino acids with a predicted MW of 36.4 kDa and migrates at ~38 kDa in SDS-PAGE under reducing conditions.

Purity: > 90 % as determined by SDS-PAGE.

Biological Activity: Testing in progress

Predicted N-terminal: Met

Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water to a concentration of 0.1 mg/mL and gently pipette the solution up and down the sides of the vial.
DO NOT VORTEX. Allow several minutes for complete reconstitution.

Storage & Stability: Stable for up to 1 year from date of receipt at -20°C to -80°C
After reconstitution, store working aliquots at -20°C to -80°C.
Avoid repeated freeze-thaw cycles.

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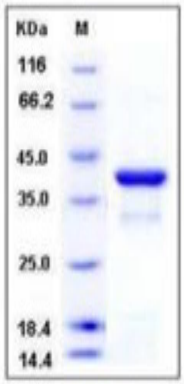
SDS-PAGE



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