

[Go to Product page](#)

## Datasheet for ABIN7317427 NFKBIA Protein (His tag)

### Overview

Quantity:	50 µg
Target:	NFKBIA
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This NFKBIA protein is labelled with His tag.

### Product Details

Purpose:	Recombinant Human IKB alpha/NFKBIA Protein (His Tag)
Sequence:	Phe 2-Leu 317
Characteristics:	A DNA sequence encoding the human NFKBIA (NP_065390.1) (Phe 2-Leu 317) was expressed, with a polyhistidine tag at the N-terminus.
Purity:	> 90 % as determined by reducing SDS-PAGE.

### Target Details

Target:	NFKBIA
Alternative Name:	IKB alpha/NFKBIA ( <a href="#">NFKBIA Products</a> )
Background:	Background: Nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, alpha (Ikb alpha, NFKBIA, or IKBA), is a member of the NF-kappa-B inhibitor family that function to inhibit the NF-kB transcription factor. NFKBIA inhibits NF-kB by masking the nuclear localization signals (NLS) of NF-kB proteins and keeping them sequestered in an inactive state in the

## Target Details

cytoplasm. In addition, NFKBIA blocks the ability of NF- $\kappa$ B transcription factors to bind to DNA, which is required for NF- $\kappa$ B'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. An autoregulatory loop is established when NF-kappa B induces expression of the I kappa B alpha gene and newly synthesized I kappa B alpha accumulates in the nucleus where it negatively regulates NF-kappa B-dependent transcription. As part of this post-induction repression, the nuclear export signal on I kappa B alpha mediates transport of NF-kappa B-I kappa B alpha complexes from the nucleus to the cytoplasm. 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, IkappaBalph, binds to NF-kappaB preventing its activation and is important in mediating resistance to apoptosis in B-cell lymphoproliferative diseases.

Synonym: IKBA;MAD-3;NFKBI

Molecular Weight:	36.4 kDa
NCBI Accession:	<a href="#">NP_065390</a>
Pathways:	<a href="#">NF-kappaB Signaling</a> , <a href="#">TCR Signaling</a> , <a href="#">TLR Signaling</a> , <a href="#">Fc-epsilon Receptor Signaling Pathway</a> , <a href="#">Activation of Innate immune Response</a> , <a href="#">Cellular Response to Molecule of Bacterial Origin</a> , <a href="#">Maintenance of Protein Location</a> , <a href="#">Hepatitis C</a> , <a href="#">Protein targeting to Nucleus</a> , <a href="#">Toll-Like Receptors Cascades</a> , <a href="#">BCR Signaling</a>

## Application Details

Restrictions:	For Research Use only
---------------	-----------------------

## Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile 50 mM Tris, 0.5M NaCl, pH 8.0
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted

samples are stable at < -20°C for 3 months.