



# Rabbit Anti-Human I $\kappa$ B alpha monoclonal antibody, clone S167 (CABT-ZB705)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Specificity</b>	It reacts with Human I $\kappa$ B alpha
<b>Target</b>	NFKBIA
<b>Immunogen</b>	Recombinant Human I $\kappa$ B alpha/NFKBIA Protein
<b>Isotype</b>	IgG
<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	Human
<b>Clone</b>	S167
<b>Purification</b>	Protein A purified
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	ELISA(cap) We recommend the following for sandwich ELISA (Capture - Detection): CABT-ZB705 - CABT-ZB1032 This antibody will detect I $\kappa$ B alpha in antibody pair set. [ABPR-ZB285]
<b>Preparation</b>	This antibody was obtained from a rabbit immunized with purified, recombinant Human I $\kappa$ B alpha / NFKBIA.
<b>Format</b>	Purified, Liquid
<b>Concentration</b>	Lot specific
<b>Size</b>	50 $\mu$ L, 100 $\mu$ L, 1 mL

Buffer	PBS
Preservative	None
Storage	<p>This antibody can be stored at 2°C-8°C for one month without detectable loss of activity.</p> <p>Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.</p>
Ship	Wet ice

## BACKGROUND

<b>Introduction</b>	<p>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 cytoplasm. Also, NFKBIA blocks the ability of NF-kB 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. 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 the 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, IkappaBalp, binds to NF-kappaB preventing its activation and is important in mediating resistance to apoptosis in B-cell lymphoproliferative diseases.</p>
<b>Keywords</b>	NFKBIA; nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, alpha; IKBA; MAD-3

## GENE INFORMATION

<b>Synonyms</b>	NFKBIA; nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, alpha; IKBA; MAD-3; NFKB1; NF-kappa-B inhibitor alpha; ikB-alpha; IkappaBalp; I-kappa-B-alpha; nuclear factor of kappa light chain gene enhancer in B-cells
<b>Entrez Gene ID</b>	<a href="#">4792</a>
<b>UniProt ID</b>	<a href="#">P25963</a>