

## Recombinant Human IKB-alpha, GST-tagged

**Cat. No.** NFKBIA-90H    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
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| <b>Product Overview</b> | Recombinant Human IKB-alpha, GST-tagged was expressed in E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Source</b>           | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>ProteinLength</b>    | 318 aa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Description</b>      | <p>Three major forms of IKB like molecules have been identified and each is characterised by multiple copies of ankyrin repeats. IKB alpha and IKB beta appear to be the major regulatory forms of IKB in most cells. These proteins interact with p65 or cRel containing forms of NFkB and block nuclear import by masking the nuclear localisation sequences of NFkB. The activation of NFkB involves the inducible phosphorylation and subsequent degradation of IKB. Immunoblotting easily detects the hyperphosphorylated forms of IKB alpha, but not phosphorylated IKB beta. Interestingly, IKB alpha and IKB beta mediate different NFkB responses. Ikb alpha appears to control more transient activation of NFkB in response to an inducer, while IKB beta controls a persistent response. Bcl3 interacts with p50 and p52 containing forms of NFkB, but rather than being an inhibitor it appears to function to stimulate transcription. The degradation of IKB is confirmed by immunoblotting.</p> |
| <b>Molecular Mass</b>   | 61 kda with tag                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Purity</b>           | >90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

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**Usage** This item is for LABORATORY RESEARCH USE ONLY.

## GENE INFORMATION

**Gene Name** NFKBIA nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, alpha [ Homo sapiens ]

**Official Symbol** NFKBIA

**Synonyms** NFKBIA; nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, alpha; NFKBI; NF-kappa-B inhibitor alpha; IkappaBalpha; IKBA; MAD 3; ikB-alpha; I-kappa-B-alpha; nuclear factor of kappa light chain gene enhancer in B-cells; major histocompatibility complex enhancer-binding protein MAD3; MAD-3;

**Gene ID** 4792

**mRNA Refseq** NM\_020529

**Protein Refseq** NP\_065390

**MIM** 164008

**UniProt ID** P25963

**Chromosome Location** 14q13

**Pathway** Activated TLR4 signalling, organism-specific biosystem; Activation of NF-kappaB in B Cells, organism-specific biosystem; Adaptive Immune System, organism-specific biosystem; Adipocytokine signaling pathway, organism-specific biosystem; Adipocytokine signaling pathway, conserved biosystem; Apoptosis, organism-specific

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biosystem; Apoptosis, organism-specific biosystem;

**Function**

NF-kappaB binding; NF-kappaB binding; enzyme binding; heat shock protein binding; identical protein binding; nuclear localization sequence binding; protein binding; transcription factor binding; ubiquitin protein ligase binding;

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