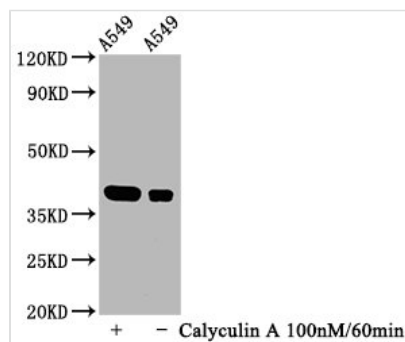




Phospho-NFKBIA (S32) Recombinant Monoclonal Antibody

Product Code	CSB-RA015761A32phHU
Abbreviation	NF-kappa-B inhibitor alpha
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P25963
Immunogen	A synthesized peptide derived from Human Phospho-NFKBIA (S32)
Species Reactivity	Human
Tested Applications	ELISA, WB, IF; Recommended dilution: WB:1:500-1:5000, IF:1:20-1:200
Relevance	Inhibits the activity of dimeric NF-kappa-B/REL complexes by trapping REL dimers in the cytoplasm through masking of their nuclear localization signals. On cellular stimulation by immune and proinflammatory responses, becomes phosphorylated promoting ubiquitination and degradation, enabling the dimeric RELA to translocate to the nucleus and activate transcription.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Alias	NF-kappa-B inhibitor alpha, I-kappa-B-alpha, Ikb-alpha, IkappaBalpa, Major histocompatibility complex enhancer-binding protein MAD3, NFKBIA, IKBA, MAD3, NFKBI
Immunogen Species	Homo sapiens (Human)
Research Area	Signal Transduction
Gene Names	NFKBIA
Clone No.	2D6

Image



Western Blot

Positive WB detected in A549 whole cell lysate(treated with Calyculin A or not)

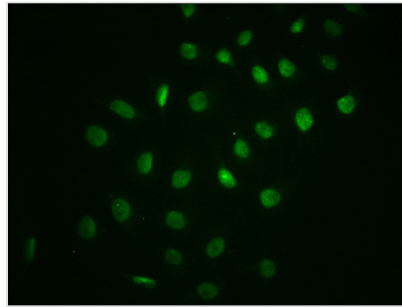
All lanes Phospho-NFKBIA antibody at 1.07μg/ml

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 39 KDa

Observed band size: 39 KDa



Immunofluorescence staining of A549 cells with CSB-RA015761A32phHU at 1:100, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4?. The secondary antibody was Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).

Description

The production of the phospho-NFKBIA (S32) recombinant monoclonal antibody starts with the isolation of genes responsible for encoding this antibody from rabbits previously immunized with a synthesized peptide derived from the human NFKBIA protein phosphorylated at S32. These antibody genes are then meticulously cloned into specialized expression vectors. Following this genetic modification, the modified vectors are introduced into host suspension cells, which are carefully cultured to stimulate the expression and secretion of antibodies. After this cultivation phase, the phospho-NFKBIA (S32) recombinant monoclonal antibody is subjected to a rigorous purification process utilizing affinity chromatography techniques, effectively separating the antibody from the surrounding cell culture supernatant. Finally, the functionality of the antibody is comprehensively assessed through a diverse range of assays, including ELISA, WB, and IF tests, conclusively confirming its ability to interact effectively with the human NFKBIA protein phosphorylated at S32.

Phosphorylation of NFKBIA at S32 is a critical regulatory event in the NF- κ B signaling pathway, controlling the activation of NF- κ B and influencing various cellular processes, including immune responses, inflammation, and cell survival. Dysregulation of this phosphorylation event can have significant implications in inflammatory diseases, cancer, and other pathological conditions.