10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

IkBalpha Antibody (Clone 6A055)

Mouse Monoclonal Antibody
Catalog # ABV10239

Specification

IkBalpha Antibody (Clone 6A055) - Product Information

Application	**WB, IHC, IP**
Primary Accession	P25963
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse IgG1**
Calculated MW	**35609**

IkBalpha Antibody (Clone 6A055) - Additional Information

Gene ID 4792

Application & Usage	**Western blotting (0.5-4 µg/ml) and immunoprecipitation (1-4 µg/ml). However, the optimal conditions should be determined individually. The antibody detects both phosphorylated and non-phosphorylated forms of IkBα.**

Other Names
IkappaBalpha , MAD3, MAD-3, IKBA, NFKBI, IKB-alpha, I-kappa-B-alpha

Target/Specificity
IkBalpha

Antibody Form
Liquid

Appearance
Colorless liquid

Formulation
100 µg (0.25 mg/ml) immunoaffinity purified mouse monoclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA, 0.02% thimerosal.

Handling
The antibody solution should be gently mixed before use.

Reconstitution & Storage
-20 °C

Background Descriptions

Precautions

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IkBalpha Antibody (Clone 6A055) is for research use only and not for use in diagnostic or therapeutic procedures.

IkBalpha Antibody (Clone 6A055) - Protein Information

Name NFKBIA

Synonyms IKBA, MAD3, NFKBI

Function
Inhibits the activity of dimeric NF-kappa-B/REL complexes by trapping REL (RELA/p65 and NFKB1/p50) dimers in the cytoplasm by masking their nuclear localization signals (PubMed:1493333, PubMed:7479976, PubMed:36651806). On cellular stimulation by immune and pro-inflammatory responses, becomes phosphorylated promoting ubiquitination and degradation, enabling the dimeric RELA to translocate to the nucleus and activate transcription (PubMed:7796813, PubMed:7628694, PubMed:7878466, PubMed:7479976).

Cellular Location
Cytoplasm. Nucleus. Note=Shuttles between the nucleus and the cytoplasm by a nuclear localization signal (NLS) and a CRM1-dependent nuclear export.

IkBalpha Antibody (Clone 6A055) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

IkBalpha Antibody (Clone 6A055) - Images

IkBalpha Antibody (Clone 6A055) - Background

NF-kB is silenced in the cytoplasm by an inhibitory protein, IkB. IkB proteins are phosphorylated by IkB kinase complex consisting of at least three proteins, IKK1/α, IKK2/β, and IKK3/g. External stimuli such TNF-α or other cytokines results in phosphorylation and degradation of IkB releasing NF-kB dimers. NF-kB dimer subsequently translocates to the nucleus and activates target genes. Six members of IkB family members have been identified. One of the first gene induced following NF-kB activation is IkBα.