Data Sheet (Cat.No.TMAC-02125)

Anti-IKBKA Antibody (4P589)

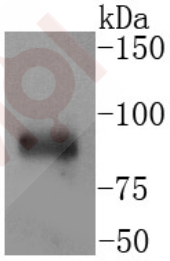
Product Details

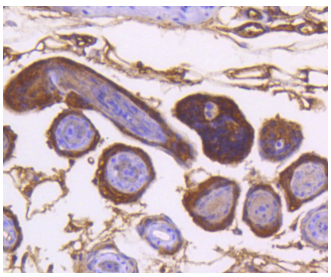
Ig Type:	IgG
Reactivity:	Human,Mouse,Rat
Conjugation:	Unconjugated
Molecular Weight:	Theoretical: 85 kDa.
Clone:	4P589
Purification:	ProA affinity purified

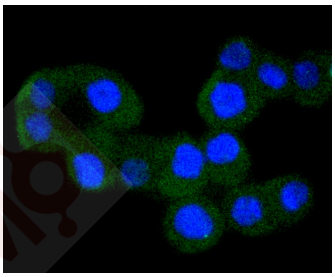
Applications

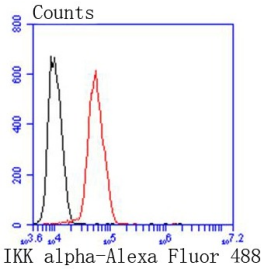
Verified Activity:

1. Western blot analysis of IKK alpha on Jurkat cells lysates using anti-IKK alpha antibody at 1/1,000 dilution.
2. Immunohistochemical analysis of paraffin-embedded mouse skin tissue using anti-IKK alpha antibody. Counter stained with hematoxylin.
3. ICC staining IKK alpha in SW480 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.
4. Flow cytometric analysis of Hela cells with IKK alpha antibody at 1/50 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody.









Application: FCM,ICC/IF,IHC,IP,WB

Recommended: WB: 1:1000; IHC: 1:50-200; ICC/IF: 1:50-200; FCM: 1:50-100

Properties

Stability & Storage: Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.

Shipping: Shipping with blue ice.

Antigen Details

Immunogen: Recombinant Protein

Uniprot ID: O15111

Synonyms: IKK alpha;IKKalpha;I Kappa B Kinase 1;Nuclear Factor Of Kappa Light Chain Gene Enhancer In B Cells Inhibitor;IKK a kinase;Conserved Helix Loop Helix Ubiquitous Kinase;NFKBIKA;IKKA; IkappaB kinase;Nuclear Factor Kappa B Inhibitor Kinase alpha;Nuclear factor NFkappaB inhibitor kinase alpha;I Kappa B Kinase alpha;TCF16;IKK 1;IKBKA;Inhibitor Of Nuclear Factor Kappa B Kinase alpha Subunit;Conserved helix loop ubiquitous kinase;IKK1;CHUK1;IkB kinase alpha subunit;CHUK;Nuclear factor NF kappa B inhibitor kinase alpha;Inhibitor Of Kappa Light Polypeptide Gene Enhancer In B Cells;IKK α;IKK A;IKKα

Research Background

The transcription factor NFkB is retained in the cytoplasm in an inactive form by the inhibitory protein IkB. Activation of NFkB requires that IkB be phosphorylated on specific serine residues, which results in targeted degradation of IkB. IkB kinase a (IKKa), previously designated CHUK, interacts with IkB-a and specifically phosphorylates IkB-a on Ser 32 and 36, the sites that trigger its degradation. IKKa appears to be critical for NFkB activation in response to proinflammatory cytokines. Phosphorylation of IkB by IKKa is stimulated by the NFkB inducing kinase (NIK), which itself is a central regulator for NFkB activation in response to TNF and IL-1. The functional IKK complex contains three subunits, IKKa, IKKb and IKKg (also designated NEMO), and each appear to make essential contributions to IkB phosphorylation.