

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Product datasheet for TA336452

IKK alpha (CHUK) Mouse Monoclonal Antibody [Clone ID: 14A231]

Product data:

Product Type: Primary Antibodies

Clone Name: 14A231

Applications: FC, IF, IHC, WB

Recommend Dilution: WB: 1 ug/ml, FC: (Intracellular): 0.25-0.5 ug/10^6 cells, IF: 1:10, IHC-P: 5ug/ml, IP: 1-2 ug/ml

Reactivity: Human, Mouse, Primate

Host: Mouse

Isotype: IgG1, kappa
Clonality: Monoclonal

Immunogen: This antibody was raised against a His-tagged full-length human IKK alpha protein.

Formulation: PBS containing 0.05% BSA, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -

20C long term. Avoid freeze-thaw cycles.

Concentration: 0.5 mg/ml

Purification: Protein G purified

Gene Name: conserved helix-loop-helix ubiquitous kinase

Database Link: NP 001269 Entrez Gene 12675 MouseEntrez Gene 1147 Human

Background: NF-kB (nuclear factor kB) is sequestered in the cytoplasm by lkB family of inhibitory proteins

that mask the nuclear localization signal of NF-kB thereby preventing translocation of NF-kB to the nucleus. External stimuli such as tumor necrosis factor 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. Synthesis of IkBa is autoregulated. IkB proteins are phosphorylated by IkB kinase complex consisting of at least three proteins, IKK1/a, IKK2/b, and IKK3/g. In vitro, IKK1/a and IKK2/b can form homo- and heterodimers that can phosphorylate IkBs at the regulatory serine residues directly. IKK1/a and IKK2/b are phosphorylated by NF-kB-inducing kinase (NIK) and MAP kinase kinase kinase-1 (MEKK1),

respectively. Targeted disruption of IKK1/a gene in mice results in skin and limb

abnormalities and death of newborns.

Synonyms: IKBKA; IKK-alpha; IKK1; IKKA; NFKBIKA; TCF16

Note: Use in Flow Intracellular reported in scientific literature (PMID 24804954)



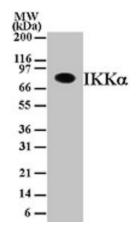


Protein Families: Druggable Genome, Protein Kinase

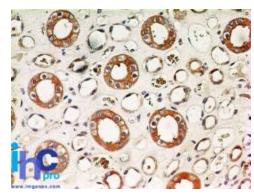
Protein Pathways:

Acute myeloid leukemia, Adipocytokine signaling pathway, Apoptosis, B cell receptor signaling pathway, Chemokine signaling pathway, Chronic myeloid leukemia, Cytosolic DNA-sensing pathway, Epithelial cell signaling in Helicobacter pylori infection, MAPK signaling pathway, NOD-like receptor signaling pathway, Pancreatic cancer, Pathways in cancer, Prostate cancer, RIG-I-like receptor signaling pathway, Small cell lung cancer, T cell receptor signaling pathway, Toll-like receptor signaling pathway

Product images:

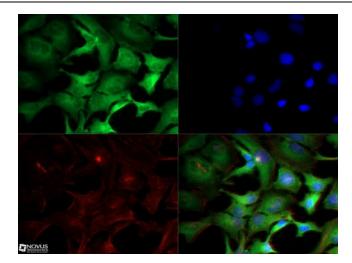


Western Blot: IKK alpha Antibody (14A231) [TA336452] - analysis of IKK alpha in Daudi cell lysate using IKK alpha antibody at 1 ug/ml.

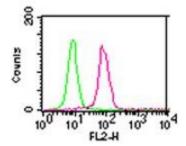


Immunohistochemistry-Paraffin: IKK alpha Antibody (14A231) [TA336452] - Formalin-fixed, paraffin-embedded human kidney (IMH-343) stained with IKK alpha antibody at 5 ug/ml.Staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10 mM





Immunocytochemistry/Immunofluorescence: IKK alpha Antibody (14A231) [TA336452] - IKK alpha antibody was tested in HeLa cells with Dylight 488 (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and Dylight 550 (red). An antibody dilutio



Flow Cytometry: IKK alpha Antibody (14A231) [TA336452] - Intracellular staining of HEK293 cells using 0.5 ug of IKK alpha antibody. Green histogram represents the isotype control antibody, red represents the IKK alpha antibody. Intracellular flow kit was