

[KD Validated] Anti-CHUK Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

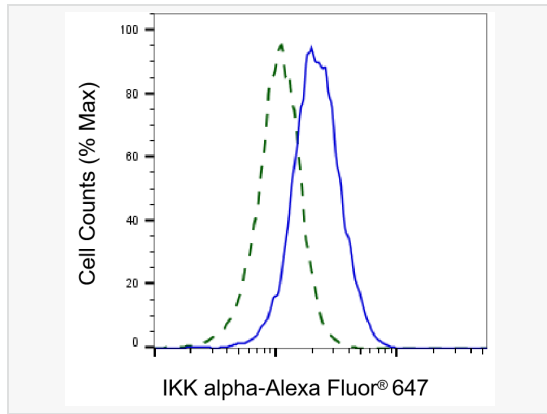
Catalog # R020313

Product Information

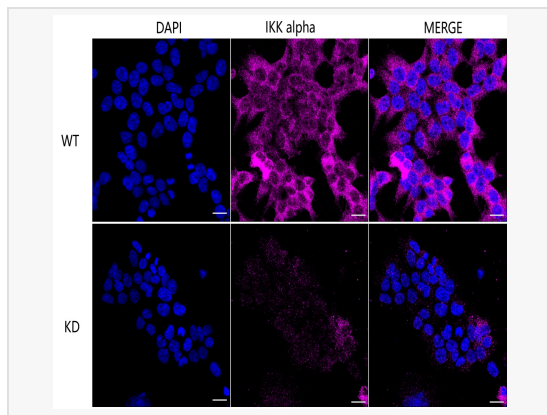
Application	WB, FC, IF (Cell)/ICC
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:5,000; FC 1:200~1:2,000; IF 1:100~1:1,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	61B46B47
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human IKK alpha
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	[KD Validated] Anti-CHUK Rabbit mAb [61B46B47] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

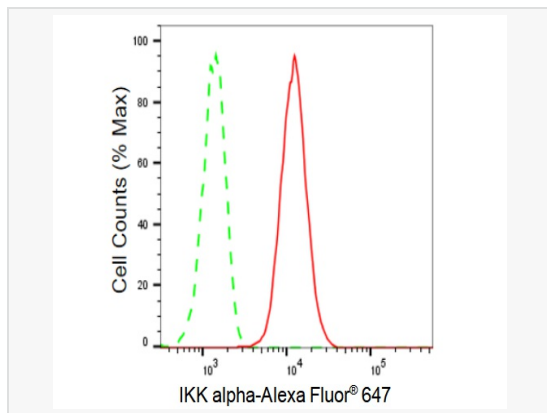
Synonyms	CHUK; Component Of Inhibitor Of Nuclear Factor Kappa B Kinase Complex; IKK-Alpha; NFKBIKA; IKK1; IKKA; Inhibitor Of Nuclear Factor Kappa-B Kinase Subunit Alpha; Conserved Helix-Loop-Helix Ubiquitous Kinase; IkBKA; TCF16; Transcription Factor 16; I-Kappa-B Kinase 1; EC 2.7.11.10; IKK-1; Nuclear Factor NF-Kappa-B Inhibitor Kinase Alpha; Nuclear Factor NFkappaB Inhibitor Kinase Alpha; IkB Kinase Alpha Subunit; I-Kappa-B Kinase-Alpha; I-Kappa-B Kinase Alpha; I-Kappa-B Kinase; IkappaB Kinase; IKK-A Kinase; EC 2.7.11; TCF-16; IKBKA; IKK-A; BPS2.
Calculated MW	Calculated MW: 85 kDa, Observed MW: 85 kDa
Uniprot ID	O15111
Gene ID	1147
Background	Plays an essential role in the NF-kappa-B signaling pathway which is activated by multiple stimuli such as inflammatory cytokines, bacterial or viral products, DNA damages or other cellular stresses. Activation of IKK depends upon phosphorylation at Ser177 and Ser181 in the activation loop of IKK β (Ser176 and Ser180 in IKK α), which causes conformational changes, resulting in kinase activation.



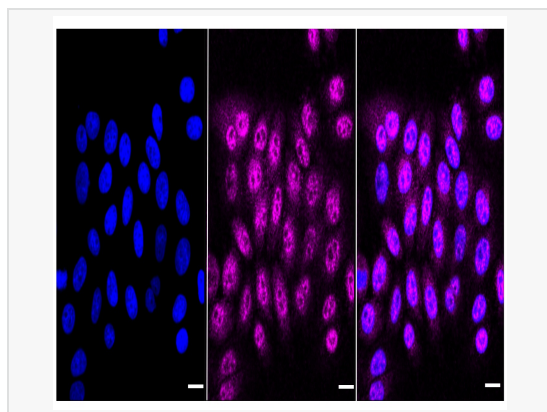
Validation of IKK alpha knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with IKK alpha antibody (R020313, 1:2,000) and analyzed using BD flow cytometer.



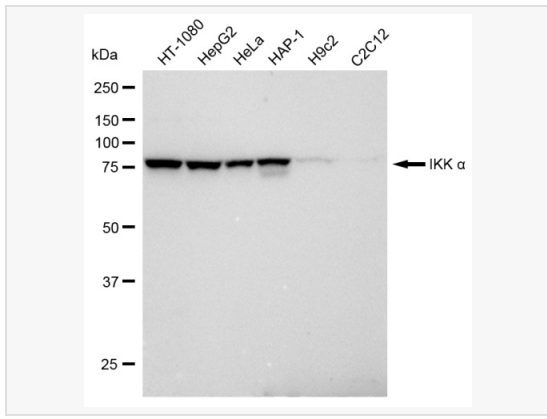
Immunocytochemical staining of HeLa cells using IKK alpha antibody (R020313, 1:1,000), Top panel: wild-type (WT); Bottom panel: IKK alpha shRNA knockdown (KD). Nuclei were stained blue with DAPI; IKK alpha was stained magenta with Alexa Fluor® 647. Scale bar, 20 μ m. Permeabilization: Triton.



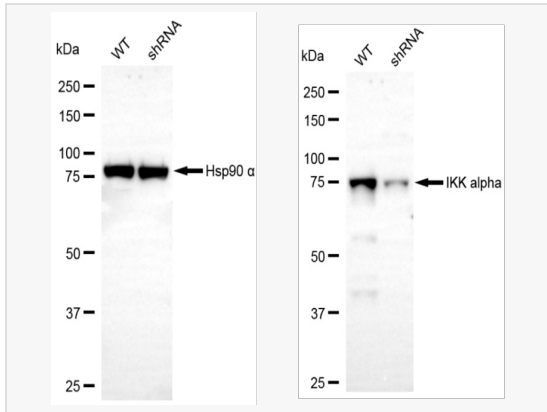
Flow cytometric analysis of IKK alpha expression in HepG2 cells using IKK alpha antibody (R020313, 1:2,000). Green, isotype control; red, IKK alpha.



Immunocytochemical staining of HepG2 cells with component of inhibitor of IKK alpha antibody (R020313, 1:1,000). Nuclei were stained blue with DAPI; Component of inhibitor of IKK alpha was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: medium. Scale bar: 20 μ m.



Western blotting analysis using IKK alpha antibody (R020313). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with IKK alpha antibody (R020313, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Western blotting analysis using IKK alpha antibody (R020313). IKK alpha expression in wild type (WT) and IKK alpha shRNA knockdown (KD) HeLa cells with 30 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with IKK alpha antibody (R020313, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.