

**Product Name: KD-Validated NFKBIA Mouse Monoclonal Antibody****Catalog #: KVA00684**

For research use only.

**Summary**

|                     |                                                                             |
|---------------------|-----------------------------------------------------------------------------|
| <b>Description</b>  | KO&KD-Validated antibody                                                    |
| <b>Host</b>         | Mouse                                                                       |
| <b>Application</b>  | WB,FCM,ICC                                                                  |
| <b>Reactivity</b>   | Human,M                                                                     |
| <b>Conjugation</b>  | Unconjugated                                                                |
| <b>Modification</b> | Unmodified                                                                  |
| <b>Isotype</b>      | Mouse IgG1                                                                  |
| <b>Clonality</b>    | Mouse mAb                                                                   |
| <b>Form</b>         | Liquid                                                                      |
| <b>Storage</b>      | Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles. |
| <b>Shipping</b>     | Ice bags                                                                    |
| <b>Buffer</b>       | Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.   |
| <b>Purification</b> | Affinity purification                                                       |

**Application**

|                         |                                                         |
|-------------------------|---------------------------------------------------------|
| <b>Dilution Ratio</b>   | WB 1:2,500-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000 |
| <b>Molecular Weight</b> | Calculated MW: 35.6kDa                                  |

**Antigen Information**

|                          |                                                                                             |
|--------------------------|---------------------------------------------------------------------------------------------|
| <b>Gene Name</b>         | NFKBIA                                                                                      |
| <b>Alternative Names</b> | I-kappa-B-alpha; NFKBI; NFKBIA; NF-kappaB inhibitor alpha; IKBA; IkappaBalpa; MAD3; RL/IF-1 |
| <b>Gene ID</b>           | 4792.0                                                                                      |
| <b>SwissProt ID</b>      | P25963                                                                                      |
| <b>Immunogen</b>         | Recombinant protein of human NFKBIA                                                         |

**Background**

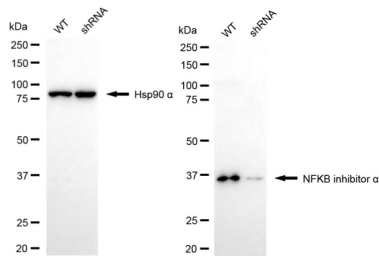
This gene encodes a member of the NF-kappa-B inhibitor family, which contain multiple ankrin repeat domains. The encoded protein interacts with REL dimers to inhibit NF-kappa-B/REL complexes which are involved in inflammatory responses. The encoded protein moves between the cytoplasm and the nucleus via a nuclear localization signal and CRM1-mediated nuclear

export. Mutations in this gene have been found in ectodermal dysplasia anhidrotic with T-cell immunodeficiency autosomal dominant disease. [provided by RefSeq, Aug 2011]

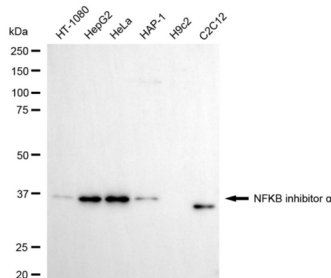
## Research Area

Signal Transduction, Epigenetics and Nuclear Signaling, Cancer, Immunology, Neuroscience

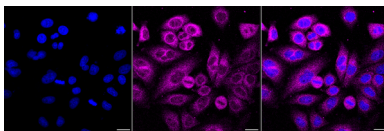
## Image Data



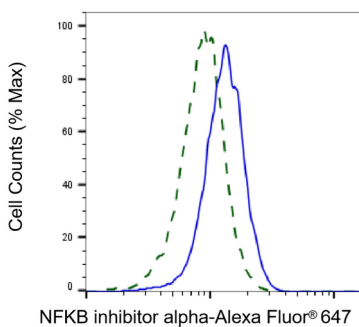
Western blotting analysis using NFKB inhibitor alpha antibody (KVA00684). NFKB inhibitor alpha expression in wild type (WT) and NFKB inhibitor alpha (NFKBIA) shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with NFKB inhibitor alpha antibody (KVA00684, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



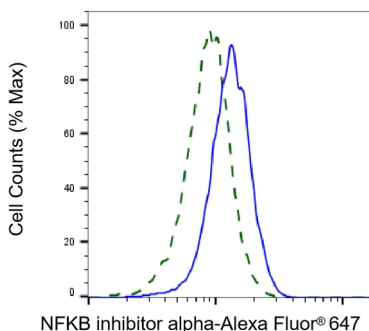
Western blotting analysis using NFKB inhibitor alpha antibody (KVA00684). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with NFKB inhibitor alpha antibody (KVA00684, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



Immunocytochemical staining of HepG2 cells with NFKB inhibitor alpha antibody (KVA00684, 1:1,000). Nuclei were stained blue with DAPI; NFKB inhibitor alpha was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and Smart Gain: Low. Scale bar, 20 µm.



Validation of NFKB inhibitor alpha knockdown using flow cytometry. Wild-type (WT, Blue) and knockdown (KD, Green) HeLa cells were stained with NFKB inhibitor alpha antibody (KVA00684, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of NFKB inhibitor alpha expression in HepG2 cells using NFKB inhibitor alpha antibody (KVA00684, 1:2,000). Green, isotype control; red, NFKB inhibitor alpha.

