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AP02651PU-S Polyclonal Antibody to NFKBIA / IKBA - Aff - Purified

Alternate names: I kappa B-alpha, I-kappa-B-alpha, IkB-alpha, IkappaBalpha, MAD3, Major histocompatibility complex enhancer-binding protein MAD3, NF-kappa-B inhibitor alpha, NFKBI

Quantity: 50 µg

Concentration: 1.0 mg/ml

Background: Three major forms of IKB like molecules have been identified and each is characterised by multiple copies of ankyrin repeats. IkappaB alpha and IkappaB beta appear to be the major regulatory forms of IKB in most cells. These proteins interact with p65 or cRel containing forms of NFkappaB and block nuclear import by masking the nuclear localisation sequences of NFkappaB. The activation of NFkappaB involves the inducible phosphorylation and subsequent degradation of IkappaB. Immunoblotting easily detects the hyperphosphorylated forms of IkappaB alpha, but not phosphorylated IkappaB beta. Interestingly, IkappaB alpha and IkappaB beta mediate different NFkappaB responses. IkappaB alpha appears to control more transient activation of NFkappaB in response to an inducer, while IkappaB beta controls a persistent response. Bcl3 interacts with p50 and p52 containing forms of NFkappaB, but rather than being an inhibitor it appears to function to stimulate transcription. The degradation of IkappaB is confirmed by immunoblotting.

Uniprot ID: P25963

NCBI: NP_065390.1

GeneID: 4792

Host: Rabbit

Immunogen: Synthetic non-phosphopeptide derived from human IkappaB-alpha around the phosphorylation site of serine 32/36 (H-D-S-G-L-D-S-M-K).

Format:
State: Liquid purified Ig fraction
Purification: Immunoaffinity chromatography
Buffer System: PBS (without Mg2+ and Ca2+), pH 7.4, 150 mM NaCl, 0.02% Sodium Azide and 50% Glycerol.

Applications:
Western blot: 1/500 - 1/1000; Incubate membrane with diluted antibody in 5% nonfat milk, 1X TBS, 0,1% Tween-20 at 4°C with gentle shaking, overnight.
Immunohistochemistry on paraffin sections: 1/50 -1/100.
Immunofluorescence: 1/100 - 1/200.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: IkappaB-alpha antibody detects endogenous levels of total IkappaB-alpha protein.
Species: Human, Mouse and Rat.
Other species not tested.

For research and in vitro use only. Not for diagnostic or therapeutic work.
Material Safety Datasheets are available at www.acris-antibodies.com or on request.

Storage:

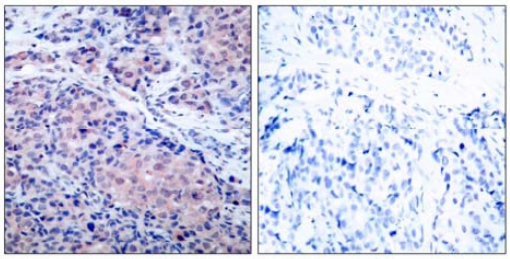
Store the antibody (in aliquots) at -20°C.
Avoid repeated freezing and thawing.
Shelf life: One year from despatch.

General Readings:

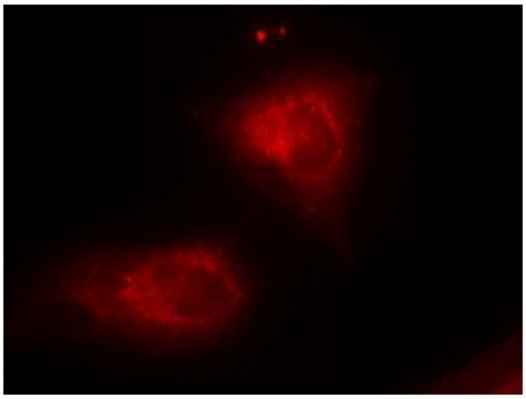
1. Mattioli I, et al. (2004)J Immunol; 172(10): 6336-44.
2. Courtois G, et al. (2003)J Clin Invest; 112(7): 1108-15.
3. Nair A, et al. (2003) Oncogene; 22(1): 50-8.
4. Fan C, et al. (2002)J Cell Sci; 115(Pt 24): 4843-53.
5. Schubert SY, et al. (2002)FASEB J; 16(14): 1931-3.

Pictures:

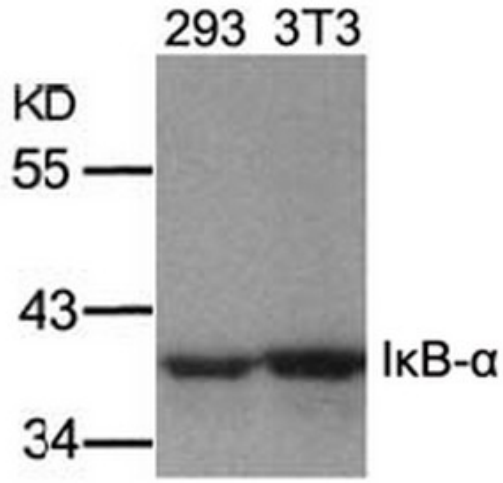
Figure 1. Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using IκB-α antibody AP02651PU.



Immunofluorescence staining of methanol-fixed HeLa cells unsing IkappaB-alpha antibody



Western Blot analysis of extracts from 293 and 3T3 cells using IkappaB-alpha antibdoy



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