



## I $\kappa$ B- $\alpha$ (Phospho-Tyr42) Antibody

#11162

**Catalog Number:** 11162-1, 11162-2

**Amount:** 50 $\mu$ g/50 $\mu$ l, 100 $\mu$ g/100 $\mu$ l

**Swiss-Prot No. :** P25963

**Form of Antibody:** Rabbit IgG in phosphate buffered saline (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

**Storage/Stability:** Store at -20°C/1 year

**Immunogen:** The antiserum was produced against synthesized phosphopeptide derived from human I $\kappa$ B- $\alpha$  around the phosphorylation site of tyrosine 42 (E-E-Y<sup>P</sup>-E-Q).

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site

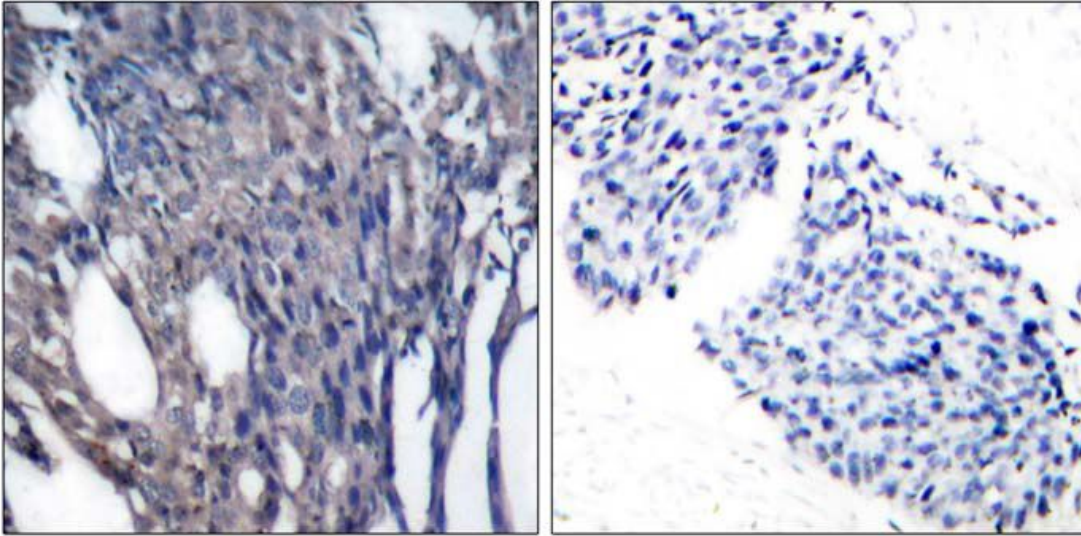
**Specificity/Sensitivity:** I $\kappa$ B- $\alpha$  (phospho-Tyr42) antibody detects endogenous levels of I $\kappa$ B- $\alpha$  only when phosphorylated at tyrosine 42.

**Reactivity:** Human, Mouse, Rat

### Applications:

Predicted MW: 85kd

IHC: 1:50~1:100



P-Peptide      -                                      +

Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using IκB-α (phospho-Tyr42) antibody (#11162).

### Background :

Inhibits the activity of dimeric NF-kappa-B/REL complexes by trapping REL dimers in the cytoplasm through masking of their nuclear localization signals. On cellular stimulation by immune and proinflammatory responses, becomes phosphorylated promoting ubiquitination and degradation, enabling the dimeric RELA to translocate to the nucleus and activate transcription.

### References:

- Béraud C, et al. (1999) Proc Natl Acad Sci U S A 96(2): 429-434.
- Sundströ S, et al. (2005) J Virol 79(4): 2230-2239.
- Liu L, et al. (1998) Mol Cell Biol 18(7): 4221-4234.
- Shrivastava A, et al. (1998) J Virol 72(12): 9722-9728.