

Enogene

# 4E-BP1 (Phospho-Thr45) Antibody

E011223

**Catalog Number:** E011223-1, E011223-2

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

**Swiss-Prot No.:** Q13541

**All Names:** 4EBP1, EIF4EBP1, Eukaryotic translation initiation factor 4E binding protein 1, Insulin-stimulated EIF-4E binding protein PHAS-I, P/OKCL.6, PHAS-1, PHAS-I

**All Sites:** Human: Thr45 or Thr46; Mouse: Thr44; Rat: Thr44

**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 4E-BP1 around the phosphorylation site of threonine 45 (S-T-T<sup>P</sup>-P-G).

**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:** 4E-BP1 (phospho-Thr45) antibody detects endogenous levels of 4E-BP1 only when phosphorylated at threonine 45. This antibody may cross-react with 4E-BP2 and 4E-BP3 when phosphorylated at equivalent sites.

**Reactivity:** Human, Mouse, Rat

**Applications:** WB: 1:500~1:1000 IHC: 1:50~1:100

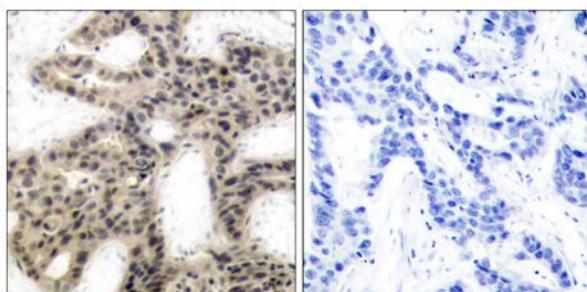
**References:** Gingras AC, et al. (1998) Genes Dev 12(4): 502-513.

Brugarolas J, et al. (2004) Genes Dev 18(23): 2893-2904.

Kumar V, et al. (2000) EMBO J 19(5): 1087-1097.

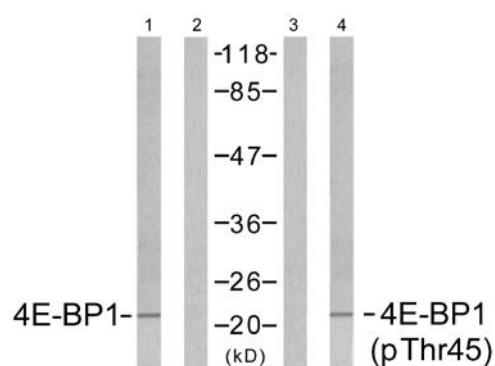
Moody CA, et al. (2005) J Virol 79(9): 5499-5506.

Burnett PE, et al. (1998) Proc Natl Acad Sci U S A 95(4): 1432-1437.



P-Peptide - +

Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using 4E-BP1 (phospho-Thr45) antibody (E011223).



Western blot analysis of extracts from MDA435 cells untreated or treated with EGF (200nm, 5min), using 4E-BP1 (Ab-45) antibody (E021216, Lane1 and 2) and 4E-BP1 (phospho-Thr45) antibody (E011223, Lane 3 and 4).