

35-1209: Polyclonal Antibody to 4E-BP1 (Phospho-Thr45)

Clonality :	Polyclonal
Application :	IHC,WB
Reactivity :	Rat,Mouse,Human
Gene :	EIF4EBP1
Gene ID :	1978
Uniprot ID :	Q13541
Format :	Purified
Alternative Name :	EIF4EBP1, PHAS-1
Isotype :	Rabbit IgG
Immunogen Information :	Peptide sequence around phosphorylation site of threonine 45 (S-T-T(p)-P-G) derived from Human 4E-BP1.

Description

4E-BP1 encodes one member of a family of translation repressor proteins. The protein directly interacts with eukaryotic translation initiation factor 4E (eIF4E), which is a limiting component of the multisubunit complex that recruits 40S ribosomal subunits to the 5' end of mRNAs. Interaction of this protein with eIF4E inhibits complex assembly and represses translation. This protein is phosphorylated in response to various signals including UV irradiation and insulin signaling, resulting in its dissociation from eIF4E and activation of mRNA translation. 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.

Product Info

Amount :	50 µl / 100 µl
Content :	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage condition :	Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid repeated freeze and thaw cycles.

Application Note

Predicted MW: 18kd, Western blotting: 1:500~1:1000, Immunohistochemistry: 1:50~1:100

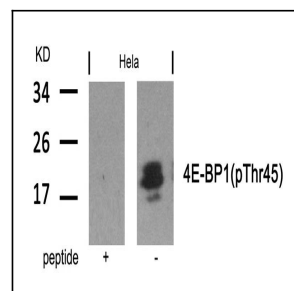


Figure 1: Western blot analysis of extracts from HeLa cells using 4E-BP1(Phospho-Thr45) Antibody 35-1209 and the same antibody preincubated with blocking peptide.

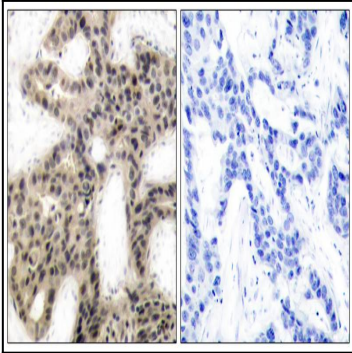


Figure 2: Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using 4E-BP1(Phospho-Thr45) Antibody 35-1209 (left) or the same antibody preincubated with blocking peptide(right).