

Monoclonal Antibody to 4E-BP1

Cat. #: Mab-606124

Description:

4E-BP1 (eukaryotic translation Initiation Factor 4E Binding Protein 1), also called ELF4EBP1/BP-1/PHAS-I, which is located on chromosome 8p12, with 118-amino acid protein (about 13kDa). Binding of eIF4EBP1 to eIF4E is reversible and is dependent on the phosphorylation status of eIF4EBP1. Non phosphorylated eIF4EBP1 will bind strongly to eIF4E while (24kDa), the phosphorylated form will not. Akt, TOR, MAP kinase, S6 kinase, and Cdc2 are known kinases capable of inactivating eIF4EBP1 binding to eIF4E by phosphorylating either threonines 35, 45, 69 or serine 64. Although, not all phosphorylation events equally block the eIF4EBP1-eIF4E interaction.

Immunogen/Specificity

Ni-NTA purified truncated recombinant 4E-BP1 expressed in E. Coli strain BL21 (DE3):

Applications :

Western Blot: 1: 500- 1: 1,000

IHC(P): 1: 500- 1: 1,000

ELISA: Propose dilution 1: 10,000.

Determining optimal working dilutions by titration test.

Formulation

Antibodies are purified by protein A affinity chromatography

Reference:

1. Pause, A. et al. 1994. Nature. 371:762-767.
2. Fadden, P. et al. 1997. J. Biol. Chem. 272:10240-10247.

Clone Number: 4B6G10

Isotype: IgG1

Species: Human

Storage and Stability: stored at -20 C

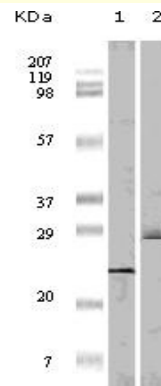


Figure 1: Western blot analysis using anti-Human 4E-BP1 monoclonal antibody against recombinant 4E-BP1 (lane 1) and A431 cell lysate (lane 2).

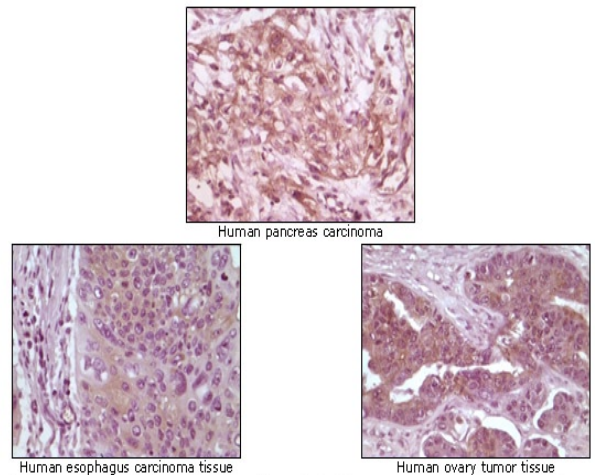


Figure 2: Immunohistochemical analysis of paraffin-embedded human pancreas carcinoma, esophagus carcinoma and ovary tumor showing cytoplasmic/membrane localization using 4E-BP1 with DAB staining.