

## 4E-BP1 Mouse Monoclonal Antibody

E10-20105

**Background:** 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.

**Catalog Number:** E10-20105

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

**Clone Number:** 11G12C11

**Species:** Mouse IgG1

**Aliases:** BP-1; 4EBP1; 4E-BP1; PHAS-I; MGC4316; EIF4EBP1

**Entrez Gene:** 1978

**Immunogen:** Purified recombinant fragment of 4EBP1 expressed in E. Coli.

**Storage:** Store at 4°C, for long term storage, store at -20°C

**Formulation:** Ascitic fluid containing 0.03% sodium azide.

**Species Reactivities:** Human

**Tested Applications:** IF, IHC, ELISA. Not yet tested in other applications. Determining optimal working dilutions by titration test.

**Application notes:** IF.1/200 - 1/1000, IHC.1/200 - 1/1000, ELISA. Propose dilution 1/10000.

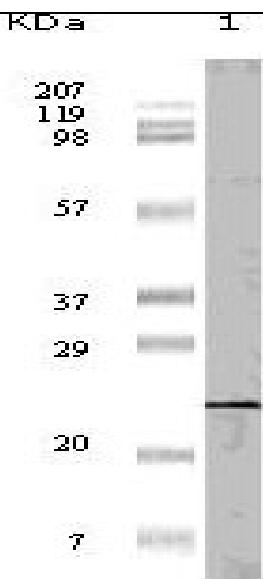


Figure 1. Western blot analysis using 4E-BP1 mouse mAb against truncated 4E-BP1 recombinant protein (1).

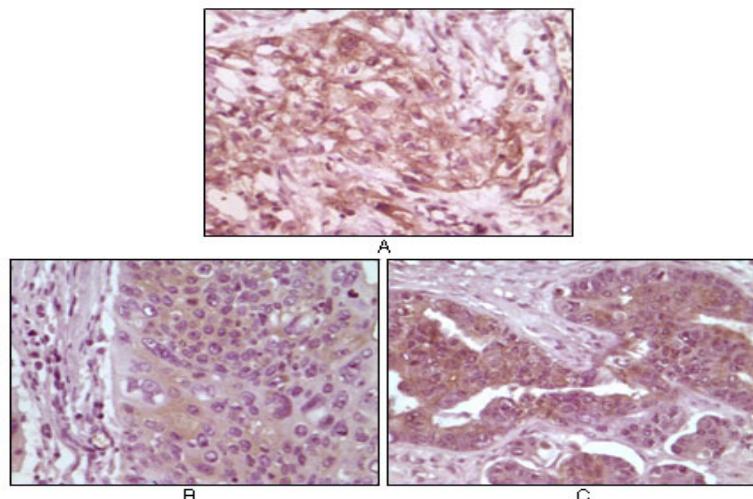


Figure 2. Immunohistochemical analysis of paraffin-embedded human pancreas carcinoma (A), esophagus carcinoma tissue (B) and ovary tumor tissue, showing cytoplasmic and membrane localization using 4E-BP1 mouse mAb with DAB staining.