

4E-BP1

Rabbit Monoclonal Antibody | Product Data Sheet

Catalog# 1557-1

Quantity: 100ul

Clone ID: Y329

Species Cross-reactivity* + Human + Mouse + Rat

Applications: + WB + IHC + ICC + IP + FC

Lot #: Please refer to vial

Molecular Wt.: 15-20 kDa

UniProt ID: Q13541

Background: 4E-BP1 (eIF4E-binding protein) also known as PHAS, is a 10-12 kDa acidic protein that compete with eIF4G for binding of eIF4E to the mRNA 5' cap structure (1). Binding of the 4E-BPs to eIF4E is reversible and is dependent on the phosphorylation status of 4E-BP. Non-phosphorylated 4E-BP1 will bind strongly to eIF4E, while the phosphorylated form will not (2). Akt, TOR, MAP kinase, S6 kinase, and Cdc2 are known kinases capable of inactivating 4E-BP1 binding to eIF4E by phosphorylating either threonines 35, 45, 69 or serine 64. However, not all phosphorylation events equally block the 4EBP1-eIF4E interaction (3-4)

Specificity: A synthetic peptide corresponding to residues near the N-term of human 4E-BP1 was used as immunogen.

Storage Condition and Buffer: Store at -20 °C. Buffer: Antibody buffer, sodium azide, glycerol, and BSA. Stable for 12 months from date of receipt.

Recommended Dilutions:

WB: 1:500 -1000

IHC: 1:100-250

ICC: 1:100-250

IP: 1:50

FC: 1:20

Background References:

1. Pause, A., G.J. Belsham, A.-C. Gingras, O. Donz
2. Gingras, A.-C., S.G. Kennedy, M.A. O'Leary, N. Sonenberg, and N. Hay. 1998. *Genes & Dev.* 12: 502-513
3. Iritani, B. M., and Eisenman, R. N. (1999) *Proc. Natl. Acad. Sci. U. S. A.* 96, 13180
4. Trumpp, A., Refaeli, Y., Oskarsson, T., Gasser, S., Murphy, M., Martin, G. R., and Bishop, J. M. (2001) *Nature* 414, 768

*Cross reactivity determined by western blot only.

Product QC'd by:



Fig 1. A. Western blot analysis on 293 cell lysate using anti-4E-BP1 RabMAb (cat. # 1557-1), dilution 1:10,000.

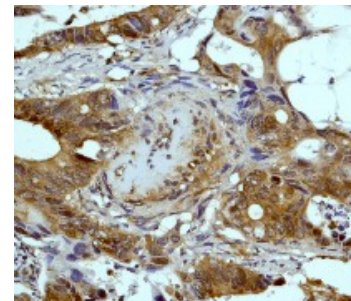


Fig 2. B. Immunohistochemical analysis of paraffin-embedded human colon carcinoma using anti-4E-BP1 RabMAb (cat. # 1557-1).

For research use only. Not for use in diagnostic or therapeutic applications.

This product was manufactured under U.S. Patent No. 5,675,063. For a complete list of protocols and available related products, please visit www.epitomics.com
Epitomics, Inc., 863 Mitten Road, Suite 103 Burlingame, California 94010-1303