



P80481Mu01

Eukaryotic Translation Initiation Factor 4E Binding Protein 1 (EIF4EBP1)

Organism: Mus musculus (Mouse)

Instruction manual

FOR IN VITRO USE AND RESEARCH USE ONLY
NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES

1th Edition (Revised in February, 2012)

[DESCRIPTION]

Protein Names: Eukaryotic Translation Initiation Factor 4E Binding Protein 1

Gene Names: EIF4EBP1

Size: 100µg

Source: Recombinant

Expression Host: *E. coli*

Function: Regulates eIF4E activity by preventing its assembly into the eIF4F complex. Mediates the regulation of protein translation by hormones, growth factors and other stimuli that signal through the MAP kinase and mTORC1 pathways.

Tissue Specificity: Highest expression in fat cells.

[PROPERTIES]

Residues: Ser2~Ile117 (Accession # Q60876), with a N-terminal His-tag.

Grade & Purity: >97%, 13.71 kDa as determined by SDS-PAGE reducing conditions.

Form & Buffer: Supplied as lyophilized form in PBS, pH 7.4.

Endotoxin Level: <1.0 EU per 1µg(determined by the LAL method).

Applications: SDS-PAGE; WB; ELISA;IP.

(May be suitable for use in other assays to be determined by the end user.)

Predicted Molecular Mass: 13.71 kDa

[PREPARATION]

Reconstitute in PBS.



[STORAGE AND STABILITY]

Storage: Store at 4°C for short term storage (1-2 weeks). Aliquot and store at -20°C or -80°C for long term storage. Avoid repeated freeze/thaw cycles.

Valid period: 12 months stored at -80°C.

[BACKGROUND]

The target protein is fused with a His-tag and its sequence is listed below. The first Met is an initiator amino acid. Moreover, Gly and Ser are added to improve the flexibility of N-terminus at both ends of the His-tag, which will increase the chelating ability of the tag to Ni-Sepharose during purification.

MGHHHHHSGSEF-SAGSSCSQT PSRAIPTRRV ALGDGVQLPP GDYSTTPGGT LFSTTPGGTR IYDRKFLME
CRNSPVAKTP PKDLPAIPGV TSPTSDEPPM QASQSQLPSS PEDKRAGGEE SQFEMDI

[REFERENCES]

1. Lin T.-A., et al. (1995) J. Biol. Chem. 270:18531-18538.
2. Dennis MD, et al. (2011) J Biol Chem. 30;286(39):34286-34297.
3. The MGC Project Team. (2004) Genome Res. 14:2121-2127.
4. Wang BT, et al. (2011) Proc Natl Acad Sci U S A. 13;108(37):15201-15206.
5. Carninci P., et al. (2005) Science 309:1559-1563.
6. Skarnes WC, et al. (2011) Nature. 15;474(7351):337-342.
7. Goorden SM, et al. (2011) Mol Cell Biol. 31(8):1672-1678.

