# elF3η (m): 293T Lysate: sc-119982



The Power to Question

## **BACKGROUND**

The initiation of protein synthesis in eukaryotic cells is regulated by interactions between protein initiation factors and RNA molecules. Eukaryotic initiation factors (elFs) are utilized in a sequence of reactions that lead to 80S ribosomal assembly and, ultimately, translation. The eukaryotic initiation factor-3 (elF3) scaffolding structure is the largest of the elF complexes and includes elF3 $\alpha$ , elF3 $\beta$ , elF

# **REFERENCES**

- Valásek, L., Nielsen, K.H., Zhang, F., Fekete, C.A. and Hinnebusch, A.G. 2004. Interactions of eukaryotic translation initiation factor 3 (eIF3) subunit NIP1/c with eIF1 and eIF5 promote preinitiation complex assembly and regulate start codon selection. Mol. Cell. Biol. 24: 9437-9455.
- Peterson, T.R. and Sabatini, D.M. 2005. eIF3: a connecTOR of S6K1 to the translation preinitiation complex. Mol. Cell 20: 655-657.
- Dong, Z. and Zhang, J.T. 2006. Initiation factor eIF3 and regulation of mRNA translation, cell growth, and cancer. Crit. Rev. Oncol. Hematol. 59: 169-180.
- LeFebvre, A.K., Korneeva, N.L., Trutschl, M., Cvek, U., Duzan, R.D., Bradley, C.A., Hershey, J.W. and Rhoads, R.E. 2006. Translation initiation factor elF4G-1 binds to elF3 through the elF3ε subunit. J. Biol. Chem. 281: 22917-22932.
- Hinnebusch, A.G. 2006. eIF3: a versatile scaffold for translation initiation complexes. Trends Biochem. Sci. 31: 553-562.
- Masutani, M., Sonenberg, N., Yokoyama, S. and Imataka, H. 2007. Reconstitution reveals the functional core of mammalian eIF3. EMBO J. 26: 3373-3383.
- Zhang, L., Pan, X. and Hershey, J.W. 2007. Individual overexpression of five subunits of human translation initiation factor elF3 promotes malignant transformation of immortal fibroblast cells. J. Biol. Chem. 282: 5790-5800.
- 8. Sato, H., Masuda, M., Kanai, M., Tsukiyama-Kohara, K., Yoneda, M. and Kai, C. 2007. Measles virus N protein inhibits host translation by binding to eIF3-p40. J. Virol. 81: 11569-11576.
- 9. Zhang, L., Smit-McBride, Z., Pan, X., Rheinhardt, J. and Hershey, J.W. 2008. An oncogenic role for the phosphorylated  $\eta$ -subunit of human translation initiation factor eIF3. J. Biol. Chem. 283: 24047-24060.

## **CHROMOSOMAL LOCATION**

Genetic locus: Eif3b (mouse) mapping to 5 G2.

#### **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

## **PRODUCT**

elF3 $\eta$  (m): 293T Lysate represents a lysate of mouse elF3 $\eta$  transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## **APPLICATIONS**

elF3 $\eta$  (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive elF3 $\eta$  antibodies. Recommended use: 10-20  $\mu$ l per lane.

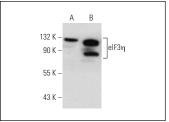
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

elF3 $\eta$  (C-5): sc-137214 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse elF3 $\eta$  expression in elF3 $\eta$  transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

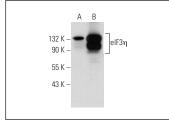
## **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## **DATA**







elF3 $\eta$  (D-9): sc-137215. Western blot analysis of elF3 $\eta$  expression in non-transfected: sc-117752 (A) and mouse elF3 $\eta$  transfected: sc-119982 (B) 293T whole cell lysates.

#### **STORAGE**

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

# **PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.