

82-FIP (K-17): sc-50880

BACKGROUND

Fragile X syndrome is the most frequent form of inherited mental retardation and is the result of transcriptional silencing of the FMR1 gene on the X chromosome. The FMR1 protein (or FMRP) is an RNA binding protein that associates with polyribosomes and is a likely component of a messenger ribonuclear protein (mRNP) particle. 82-FIP, is an RNA binding protein that interacts with FMR1 through an N-terminal interaction motif. In some neurons it is detected in both nucleus and cytoplasm, while it is only found in the cytoplasm of other neurons. The localizations appear to be cell cycle-dependent, suggesting that 82-FIP is modulated by the cell cycle. The human 82-FIP protein is comprised of 695 amino acids and shares 95% sequence homology with the mouse protein.

REFERENCES

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4. Ballif, B.A., Villen, J., Beausoleil, S.A., Schwartz, D. and Gygi, S.P. 2004. Phosphoproteomic analysis of the developing mouse brain. *Mol. Cell. Proteomics* 3: 1093-1101.
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CHROMOSOMAL LOCATION

Genetic locus: NUFIP2 (human) mapping to 17q11.2; Nufip2 (mouse) mapping to 11 B5.

SOURCE

82-FIP (K-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of 82-FIP of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-50880 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

82-FIP (K-17) is recommended for detection of 82-FIP of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

82-FIP (K-17) is also recommended for detection of 82-FIP in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for 82-FIP siRNA (h): sc-60103, 82-FIP siRNA (m): sc-60104, 82-FIP shRNA Plasmid (h): sc-60103-SH, 82-FIP shRNA Plasmid (m): sc-60104-SH, 82-FIP shRNA (h) Lentiviral Particles: sc-60103-V and 82-FIP shRNA (m) Lentiviral Particles: sc-60104-V.

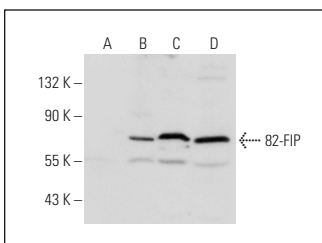
Molecular Weight of 82-FIP: 76 kDa.

Positive Controls: 82-FIP (h): 293T Lysate: sc-111780, NTERA-2 cl.D1 whole cell lysate: sc-364181 or NIH/3T3 whole cell lysate: sc-2210.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



82-FIP (K-17): sc-50880. Western blot analysis of 82-FIP expression in non-transfected: sc-117750 (A), human 82-FIP transfected: sc-111780 (B), NTERA-2 cl.D1 (C) and NIH/3T3 (D) whole cell lysates.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

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