

CYFIP1 (h): 293T Lysate: sc-171687

BACKGROUND

Fragile X syndrome is the most frequent form of inherited mental retardation and is a result of transcriptional silencing of the FMR1 gene on the X chromosome. The FMR1 protein (also designated FMRP) is an RNA-binding protein that associates with polyribosomes and is a likely component of a messenger ribonuclear protein (mRNP) particle. FMR1 can also interact with two fragile X syndrome related factors, FXR1 (also designated FXR1P) and FXR2 (also designated FXR2P). These proteins form heterodimers through their N-terminal coiled-coiled domains. CYFIP1 and CYFIP2 (also known as cytoplasmic FMRP interacting proteins 1 and 2, respectively, and as Sra-1 in mouse) both interact with FMR1 but CYFIP2 also reacts with FXR1 and FXR2. CYFIP1 and CYFIP2 bind GTP-bound Rac1 to release FMRP in its active state, which is thought to regulate mRNA translation of neural cytoskeletal proteins. A loss of CYFIP1 and CYFIP2 leads to mutant neurons with defective axonal growth and motor function.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CYFIP1 (human) mapping to 15q11.2.

PRODUCT

CYFIP1 (h): 293T Lysate represents a lysate of human CYFIP1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

CYFIP1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive CYFIP1 antibodies. Recommended use: 10-20 µl per lane.

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

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.

RESEARCH USE

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

PROTOCOLS

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