

GRAP1 (h2): 293T Lysate: sc-172182

BACKGROUND

GRAP1, also designated GRASP-1 or GRIP-associated protein, contains a RASGEF (Ras GDP/GTP exchange factor) domain, a caspase-3 cleavage site, a region homologous to RBD (Ras binding domain) and a PDZ domain. The caspase-3 cleavage site separates these domains into an amino-terminal GEF catalytic domain and a carboxyl-terminal regulatory domain, which is a proteolytic fragment. This overall structure is similar to Ral GDS. GRAP1 is a member of RASGEF (Ras protein GDP/GTP exchange factors) family. GRAP1 is expressed in the cytosol and partially localized to the membrane in all tissues of the nervous system, while the fragment is located only in the cytosol. GRAP1 associates with the seventh GRIP1 (glutamate receptor interacting protein) PDZ domain. GRIP1 binds to the C-termini of AMPA receptors and may be an adapter protein that links AMPA receptors to other proteins. GRAP1 may be involved in the regulation of Ras signaling and AMPA receptor distribution, through the activation of NMDA receptors. Caspase-3 may disrupt the proper regulation or targeting of GEF by cleaving the regulatory domain from the catalytic domain.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GRIPAP1 (human) mapping to Xp11.23.

PRODUCT

GRAP1 (h2): 293T Lysate represents a lysate of human GRAP1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

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.

APPLICATIONS

GRAP1 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive GRAP1 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.

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.