SANTA CRUZ BIOTECHNOLOGY, INC.

Rim3 (E-22): sc-102088



The Power to Question

BACKGROUND

Rab 3, a neural/neuroendocrine-specific member of the Rab family, is involved in Ca²⁺-regulated exocytosis and functions in an inhibitory capacity, controlling the recruitment and pooling of secretory vesicles at the plasma membrane. The Rim (Rab 3 interacting molecule) family of proteins (Rim1, Rim2, Rim3 and Rim4) are multidomain adaptors that regulate Rab 3 activity and subsequent neurotransmitter release. Rim3, also known as RIMS3 (regulating synaptic membrane exocytosis 3) or NIM3, is a 308 amino acid member of the Rim family. Localized to the synapse and to cell junctions, Rim3 contains one C2 domain and is thought to play an important role in the regulation of synaptic membrane exocytosis. Rim3, a protein that may be phosphorylated upon DNA damage, is expressed throughout the body with highest levels present in brain tissue.

REFERENCES

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- Haynes, L.P., Evans, G.J., Morgan, A., and Burgoyne, R.D. 2001. A direct inhibitory role for the Rab3-specific effector, NOC2, in Ca²⁺-regulated exocytosis in neuroendocrine cells. J. Biol. Chem. 27: 9726-9732.
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CHROMOSOMAL LOCATION

Genetic locus: RIMS3 (human) mapping to 1p34.2; Rims3 (mouse) mapping to 4 D2.2.

SOURCE

Rim3 (E-22) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping raised against Rim3 of human origin of Rim3of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 100 μg IgG in 1.0 ml of PBS with < 0.1% sodium azide, 0.1% gelatin and <0.02% sucrose.

APPLICATIONS

Rim3 (E-22) is recommended for detection of Rim3 of mouse, rat, human, dog and zebrafish origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Rim3 siRNA (h): sc-88820, Rim3 siRNA (m): sc-152966, Rim3 shRNA Plasmid (h): sc-88820-SH, Rim3 shRNA Plasmid (m): sc-152966-SH, Rim3 shRNA (h) Lentiviral Particles: sc-88820-V and Rim3 shRNA (m) Lentiviral Particles: sc-152966-V.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941. 4) Immuno-histochemistry: use ImmunoCruz[™]: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

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