SANTA CRUZ BIOTECHNOLOGY, INC.

RIA1 (C-15): sc-240829

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

RIA1 (ribosome assembly 1), also known as EFTUD1 (elongation factor Tu GTP-binding domain-containing protein 1) or FAM42A, is a 1,120 amino acid protein that exists as three alternatively spliced isoforms and belongs to the GTP-binding elongation factor family. The gene encoding RIA1 maps to human chromosome 15, which is comprised of approximately 106 million base pairs, making up about 3% of the human genome. Angelman and Prader-Willi syndromes are associated with loss of function or deletion of genes in the 15q11-q13 region. In the case of Angelman syndrome, this loss is due to inactivity of the maternal 15q11-q13 encoded UBE3A gene in the brain by either chromosomal deletion or mutation. In cases of Prader-Willi syndrome, there is a partial or complete deletion of this region from the paternal copy of chromosome 15. Tay-Sachs disease is a lethal disorder associated with mutations of the HEXA gene, which is encoded by chromosome 15. Marfan syndrome is associated with chromosome 15 through the FBN1 gene.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: EFTUD1 (human) mapping to 15q25.2; Eftud1 (mouse) mapping to 7 D3.

SOURCE

RIA1 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of RIA1 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-240829 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

RIA1 (C-15) is recommended for detection of Eftud1 of mouse and rat origin, and RIA1 of human origin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

RIA1 (C-15) is also recommended for detection of RIA1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for RIA1 siRNA (h): sc-90234, Eftud1 siRNA (m): sc-143316, RIA1 shRNA Plasmid (h): sc-90234-SH, Eftud1 shRNA Plasmid (m): sc-143316-SH, RIA1 shRNA (h) Lentiviral Particles: sc-90234-V and Eftud1 shRNA (m) Lentiviral Particles: sc-143316-V.

Molecular Weight of RIA1 isoforms: 125/120/96 kDa.

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) 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.

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.

PROTOCOLS

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