SANTA CRUZ BIOTECHNOLOGY, INC.

RAI1 (C-14): sc-48661

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Retinoic acid induced 1 (RAI1) is a 1,906 amino acid protein containing an N-terminal polyglutamine stretch that is expressed in most tissues, with highest expression in neuronal tissues. RAI1 functions as a transcriptional regulator and is important for embryonic and postnatal developments. Heterozygous deletions of the RAI1 gene are associated with Smith-Magenis syndrome (SMS), a mental retardation syndrome with behavioral, neurological and skeletal anomalies. Individuals affected with SMS usually display self-injurious behaviors, sleep disturbance, developmental delay and reduced motor and cognitive skills. RAI1 haploinsufficiency is specifically responsible for the obesity and craniofacial symptoms of SMS. RAI1 mutations have also been implicated in schizophrenia and spinocerebellar ataxia type 2.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: RAI1 (human) mapping to 17p11.2; Rai1 (mouse) mapping to 11 B1.3.

SOURCE

RAI1 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of RAI1 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-48661 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

RAI1 (C-14) is recommended for detection of RAI1 isoforms 1 and 2 only 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).

RAI1 (C-14) is also recommended for detection of RAI1 isoforms 1 and 2 only in additional species, including equine, canine and bovine.

Suitable for use as control antibody for RAI1 siRNA (h): sc-61438, RAI1 siRNA (m): sc-61439, RAI1 shRNA Plasmid (h): sc-61438-SH, RAI1 shRNA Plasmid (m): sc-61439-SH, RAI1 shRNA (h) Lentiviral Particles: sc-61438-V and RAI1 shRNA (m) Lentiviral Particles: sc-61439-V.

Molecular Weight of RAI1: 203 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.