SANTA CRUZ BIOTECHNOLOGY, INC.

AKR1CL1 (Y-17): sc-249917

BACKGROUND

AKR1CL1 (aldo-keto reductase family 1, member C-like 1) is a 129 amino acid protein that localizes to the cytoplasm and participates in oxidoreductase activities. Located on human chromosome 10p15.1, the AKR1CL1 gene is one of six known human AKR genes, which include AKR1CL2, DD1, DD2, DD3 and DD4, and is located between DD3 and DD4. A deletion in the 10.15 region of the short arm of chromosome 10, which includes AKR1CL1, is associated with congenital Rett-syndrome, a severe neurodegenerative disorder typified by acquired microcephaly, communication dysfunction, psychomotor regression, seizures and stereotypical hand movements.

REFERENCES

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2. Matsunaga, T., Shintani, S. and Hara, A. 2006. Multiplicity of mammalian reductases for xenobiotic carbonyl compounds. Drug Metab. Pharmacokinet. 21: 1-18.
3. Reue, K. and Vergnes, L. 2006. Approaches to lipid metabolism gene identification and characterization in the postgenomic era. J. Lipid Res. 47: 1891-1907.
4. Jacob, F.D., Ramaswamy, V., Andersen, J. and Bolduc, F.V. 2009. Atypical Rett syndrome with selective FOXG1 deletion detected by comparative genomic hybridization: case report and review of literature. Eur. J. Hum. Genet. 17: 1577-1581.
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CHROMOSOMAL LOCATION

Genetic locus: AKR1CL1 (human) mapping to 10p15.1.

SOURCE

AKR1CL1 (Y-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of AKR1CL1 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-249917 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

AKR1CL1 (Y-17) is recommended for detection of AKR1CL1 of 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); non cross-reactive with AKR1CL2.

Suitable for use as control antibody for AKR1CL1 siRNA (h): sc-90508, AKR1CL1 shRNA Plasmid (h): sc-90508-SH and AKR1CL1 shRNA (h) Lentiviral Particles: sc-90508-V.

Molecular Weight of AKR1CL1: 15 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.