SANTA CRUZ BIOTECHNOLOGY, INC.

ARS2 (K-15): sc-162540

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

ARS2 (arsenate (or arsenite-) resistance protein 2), also known as ASR2, is an 876 amino acid protein that belongs to the ARS2 family. Expressed ubiquitously in mammals and localized to the nucleus, ARS2 is evolutionarily conserved (at least 98% sequence identity among mammals) and appears to be essential for early mammalian development with a likely role in vital cellular processes. Mouse embryos lacking ARS2 exhibit excessive apoptosis and die around the time of implantation. In humans, ARS2 is known to interact with RNPS1, a protein involved in the activation of pre-mRNA splicing. In addition, the gene encoding ARS2 is located on chromosome 7 within the region that is commonly deleted in myeloid leukemia. This suggests a possible role of ARS2 in the development of myeloid leukemia. Due to alternative splicing events, ARS2 exists in four isoforms, namely isoform A, isoform B, isoform 3 and isoform 4.

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CHROMOSOMAL LOCATION

Genetic locus: SRRT (human) mapping to 7q22.1; Srrt (mouse) mapping to 5 G2.

SOURCE

ARS2 (K-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ARS2 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-162540 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ARS2 (K-15) is recommended for detection of ARS2 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); non cross-reactive with ARSA.

ARS2 (K-15) is also recommended for detection of ARS2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ARS2 siRNA (h): sc-89387, ARS2 siRNA (m): sc-141277, ARS2 shRNA Plasmid (h): sc-89387-SH, ARS2 shRNA Plasmid (m): sc-141277-SH, ARS2 shRNA (h) Lentiviral Particles: sc-89387-V and ARS2 shRNA (m) Lentiviral Particles: sc-141277-V.

Molecular Weight (predicted) of ARS2: 100 kDa.

Molecular Weight (observed) of ARS2: 131 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.