SANTA CRUZ BIOTECHNOLOGY, INC.

ARVCF (D-20): sc-18475

BACKGROUND

The armadillo repeat gene deleted in velo-cardiofacial syndrome (ARVCF) is a member of the p120 (ctn) subfamily of armadillo repeat proteins. ARVCF is a 962 amino acid protein that contains a coil domain and ten tandem armadillo repeats. Like a number of catenins that directly bind the cytoplasmic tails of cadherin, ARVCF binds the cytoplasmic domain of M-cadherin through its armadillo repeat region. ARVCF also competes with p120 for interaction with the E-cadherin juxtamembrane domain. However, ARVCF is tenfold less abundant than p120 in a wide variety of cell types and is difficult to detect by immunofluorescence unless it is overexpressed. ARVCF is dually localized to junctions and to nuclei, suggesting that ARVCF may function in different cellular compartments, as is the case for other armadillo repeat proteins including p120.

REFERENCES

1. Sirotkin, H., et al. 1997. Identification of a new human catenin gene family member (ARVCF) from the region deleted in velo-cardio-facial syndrome. Genomics 41: 75-83.
2. Mariner, D.J., et al. 1999. Production and characterization of monoclonal antibodies to ARVCF. Hybridoma 18: 343-349.
3. Mariner, D.J., et al. 2000. ARVCF localizes to the nucleus and adherens junction and is mutually exclusive with p120 (ctn) in E-cadherin complexes. J. Cell Sci. 113: 1481-1490.
4. Kaufmann, U., et al. 2000. The armadillo repeat region targetws ARVCF to cadherin-based cellular junctions. J. Cell Sci. 113: 4121-4135.
5. Paulson, A.F., et al. 2000. Xarvcf, *Xenopus* member of the p120 catenin subfamily associating with cadherin juxtamembrane region. J. Biol. Chem. 275: 30124-30131.

CHROMOSOMAL LOCATION

Genetic locus: ARVCF (human) mapping to 22q11.21; Arvcf (mouse) mapping to 16 A3.

SOURCE

ARVCF (D-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ARVCF 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-18475 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

ARVCF (D-20) is recommended for detection of ARVCF of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

ARVCF (D-20) is also recommended for detection of ARVCF in additional species, including equine, canine and bovine.

Suitable for use as control antibody for ARVCF siRNA (h): sc-29744, ARVCF siRNA (m): sc-29745, ARVCF shRNA Plasmid (h): sc-29744-SH, ARVCF shRNA Plasmid (m): sc-29745-SH, ARVCF shRNA (h) Lentiviral Particles: sc-29744-V and ARVCF shRNA (m) Lentiviral Particles: sc-29745-V.

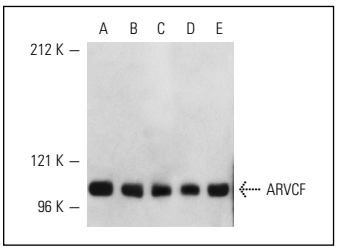
Molecular Weight of ARVCF: 120 kDa.

Positive Controls: CCRF-CEM cell lysate: sc-2225, U-2 OS cell lysate: sc-2295 or HeLa whole cell lysate: sc-2200.

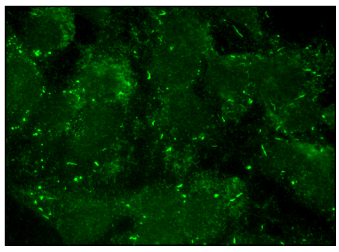
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



ARVCF (D-20): sc-18475. Western blot analysis of ARVCF expression in CCRF-CEM (**A**), U-2 OS (**B**), HeLa (**C**), Caki-1 (**D**) and Hep G2 (**E**) whole cell lysates.



ARVCF (D-20): sc-18475. Immunofluorescence staining of formalin-fixed Hep G2 cells showing focal adhesion sites localization.

PROTOCOLS

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