

# ARVCF (C-18): sc-14830

## 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

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2. Mariner, D.J., D.J., Sirotkin, H., Daniel, J.M., Lindman, B.R., Mernaugh, R.L., Patten, A.K., Throeson, M.A., and Reynolds, A.B. 1999. Production and characterization of monoclonal antibodies to ARVCF. *Hybridoma* 18: 343-349.
3. Mariner, D.J., Wang, J., and Reynolds, A.B. 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., Zupping, C., Waibler, Z., Rudiger, M., Urbich, C., Martin, B., Jockusch, B.M., Eppenberger, H., and Starzinski-Powitz, A. 2000. The armadillo repeat region targets ARVCF to cadherin-based cellular junctions. *J. Cell. Sci.* 113: 4121-4135.
5. Paulson, A.F., Mooney, E., Fang, X., Ji, H., and McCrea, P.D. 2000. Xarvcf, *Xenopus* member of the p120 catenin subfamily associating with cadherin juxtamembrane region. *J. Biol. Chem.* 275: 30124-30131.

## SOURCE

ARVCF (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at 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-14830 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.

## APPLICATIONS

ARVCF (C-18) is recommended for detection of ARVCF of human and *Xenopus* 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 (C-18) is also recommended for detection of ARVCF in additional species, including equine, canine and porcine.

Suitable for use as control antibody for ARVCF siRNA (h): sc-29744.

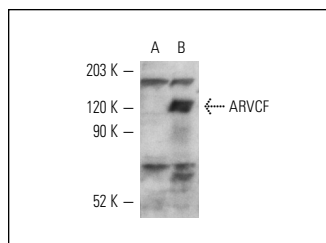
Molecular Weight of ARVCF: 120 kDa.

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 (C-18): sc-14830. Western blot analysis of ARVCF expression in MDCK (A) and human ARVCF transfected MDCK (B) whole cell lysates.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.