

# ARVCF (4B1): sc-23874

## 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.

## CHROMOSOMAL LOCATION

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

## SOURCE

ARVCF (4B1) is a mouse monoclonal antibody raised against amino acids 848-962 of ARVCF.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ARVCF (4B1) is available conjugated to agarose (sc-23874 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-23874 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-23874 PE), fluorescein (sc-23874 FITC), Alexa Fluor® 488 (sc-23874 AF488), Alexa Fluor® 546 (sc-23874 AF546), Alexa Fluor® 594 (sc-23874 AF594) or Alexa Fluor® 647 (sc-23874 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-23874 AF680) or Alexa Fluor® 790 (sc-23874 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

ARVCF (4B1) is recommended for detection of ARVCF of mouse, rat, human, canine and monkey 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

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.

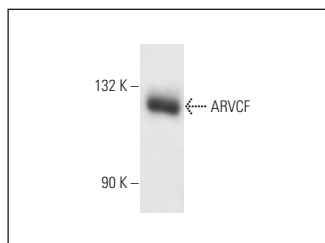
Molecular Weight of ARVCF: 120 kDa.

Positive Controls: MDCK cell lysate: sc-2252, U-2 OS cell lysate: sc-2295 or HeLa whole cell lysate: sc-2200.

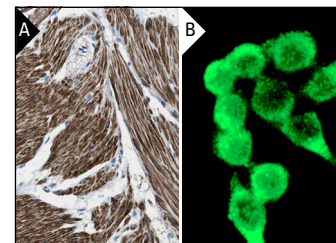
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



ARVCF (4B1): sc-23874. Western blot analysis of ARVCF expression in ARVCF-transfected MDCK whole cell lysate.



ARVCF (4B1): sc-23874. Immunoperoxidase staining of formalin fixed, paraffin-embedded human smooth muscle tissue showing cytoplasmic staining of smooth muscle cells. Kindly provided by The Swedish Human Protein Atlas (HPA) program (A). Immunofluorescence staining of methanol-fixed HeLa cells showing cytoskeletal localization (B).

## SELECT PRODUCT CITATIONS

- Huang, J., et al. 2008. Design of protein function leaps by directed domain interface evolution. Proc. Natl. Acad. Sci. USA 105: 6578-6583.
- Rahman, T.U., et al. 2018. Androgen-induced alterations in endometrial proteins crucial in recurrent miscarriages. Oncotarget 9: 24627-24641.

## 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](http://www.scbt.com) for detailed protocols and support products.