

# DIXDC1 (C-14): sc-109529

## BACKGROUND

DIXDC1 (DIX domain containing 1), also known as CCD1 or Dixin, is a 683 amino acid protein that localizes to the cell junction and to the cytoplasm in an isoform-dependent manner and contains one DIX domain and one CH (calponin-homology) domain. Expressed ubiquitously with highest expression in skeletal and cardiac muscle, DIXDC1 interacts with F-Actin and functions as a positive regulator of the Wnt signaling pathway, effectively targeting the  $\beta$ -catenin-TCF complex for gene expression and mediating Actin dynamics within the cytoskeleton. The gene encoding DIXDC1 maps to human chromosome 11, which houses over 1,400 genes and comprises nearly 4% of the human genome. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are associated with defects in genes that maps to chromosome 11.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: DIXDC1 (human) mapping to 11q23.1; Dixdc1 (mouse) mapping to 9 A5.3.

## SOURCE

DIXDC1 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of DIXDC1 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-109529 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

DIXDC1 (C-14) is recommended for detection of DIXDC1 isoforms 1, 2 and 3 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 DIXDC1 isoforms 4.

DIXDC1 (C-14) is also recommended for detection of DIXDC1 isoforms 1, 2 and 3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for DIXDC1 siRNA (h): sc-96677, DIXDC1 siRNA (m): sc-143051, DIXDC1 shRNA Plasmid (h): sc-96677-SH, DIXDC1 shRNA Plasmid (m): sc-143051-SH, DIXDC1 shRNA (h) Lentiviral Particles: sc-96677-V and DIXDC1 shRNA (m) Lentiviral Particles: sc-143051-V.

Molecular Weight of DIXDC1: 77 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](http://www.scbt.com) or our catalog for detailed protocols and support products.