## SANTA CRUZ BIOTECHNOLOGY, INC.

# C12orf29 (D-16): sc-241230



### BACKGROUND

Encoding over 1,100 genes within 132 million bases, chromosome 12 makes up about 4.5% of the human genome. A number of skeletal deformities are linked to chromosome 12 including hypochondrogenesis, achondrogenesis and Kniest dysplasia. Noonan syndrome, which includes heart and facial developmental defects among the primary symptoms, is caused by a mutant form of PTPN11 gene product, SH-PTP2. Chromosome 12 is also home to a homeobox gene cluster which encodes crucial transcription factors for morphogenesis, and the natural killer complex gene cluster encoding C-type lectin proteins which mediate the NK cell response to MHC I interaction. Trisomy 12p leads to facial development defects, seizure disorders and a host of other symptoms varying in severity depending on the extent of mosaicism and is most severe in cases of complete trisomy. The C12orf29 gene product has been provisionally designated C12orf29 pending further characterization.

## CHROMOSOMAL LOCATION

Genetic locus: C12orf29 (human) mapping to 12q21.32; 4930430F08Rik (mouse) mapping to 10 D1.

## SOURCE

C12orf29 (D-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of C12orf29 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-241230 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

C12orf29 (D-16) is recommended for detection of C12orf29 of human origin, 4930430F08Rik of mouse origin and RGD1307947 of rat 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)], immuno-fluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

C12orf29 (D-16) is also recommended for detection of C12orf29 in additional species, including avian.

Suitable for use as control antibody for C12orf29 siRNA (h): sc-96243, 4930430F08Rik siRNA (m): sc-140053, C12orf29 shRNA Plasmid (h): sc-96243-SH, 4930430F08Rik shRNA Plasmid (m): sc-140053-SH, C12orf29 shRNA (h) Lentiviral Particles: sc-96243-V and 4930430F08Rik shRNA (m) Lentiviral Particles: sc-140053-V.

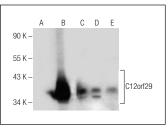
Molecular Weight of C12orf29 isoforms: 37/35/4 kDa.

Positive Controls: C12orf29 (h): 293T Lysate: sc-111519, T-47D cell lysate: sc-2293 or HL-60 whole cell lysate: sc-2209.

#### **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



C12orf29 (D-16): sc-241230. Western blot analysis of C12orf29 expression in non-transfected 293T: sc-11752 (A), human C12orf29 transfected 293T: sc-111519 (B), NCI-H460 (C), T-47D (D) and HL-60 (E) whole cell lysates.

#### **STORAGE**

Store at 4° C, \*\*D0 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.



Try C12orf29 (D-9): sc-390730 or C12orf29 (B-1): sc-390846, our highly recommended monoclonal alternatives to C12orf29 (D-16).