SANTA CRUZ BIOTECHNOLOGY, INC.

C12orf57 (S-15): sc-167289

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 class 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 C12orf57 gene product has been provisionally designated C12orf57 pending further characterization.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: C12orf57 (human) mapping to 12p13.31; Grcc10 (mouse) mapping to 6 F2.

SOURCE

C12orf57 (S-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of C12orf57 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-167289 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

C12orf57 (S-15) is recommended for detection of C12orf57 of human origin, Grcc10 of mouse origin and the corresponding rat homolog 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 other C12orf family members.

C12orf57 (S-15) is also recommended for detection of C12orf57 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for C12orf57 siRNA (h): sc-95698, Grcc10 siRNA (m): sc-145758, C12orf57 shRNA Plasmid (h): sc-95698-SH, Grcc10 shRNA Plasmid (m): sc-145758-SH, C12orf57 shRNA (h) Lentiviral Particles: sc-95698-V and Grcc10 shRNA (m) Lentiviral Particles: sc-145758-V.

Molecular Weight of C12orf57: 13 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 or our catalog for detailed protocols and support products.