

KIAA0528 (N-15): sc-168339

BACKGROUND

KIAA0528 is a 1,000 amino acid protein that contains 2 C2 domains and undergoes several posttranslational phosphorylation events. KIAA0528 exists as two alternatively spliced isoforms and is encoded by a gene that maps to human chromosome 12. 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.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: KIAA0528 (human) mapping to 12p12.1; 5730419I09Rik (mouse) mapping to 6 G3.

SOURCE

KIAA0528 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of KIAA0528 of human origin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

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-168339 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

KIAA0528 (N-15) is recommended for detection of 5730419I09Rik of mouse origin, KIAA0528 of human origin and RGD1304592 of rat 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 other KIAA family members.

KIAA0240 (N-14) is also recommended for detection of KIAA0240 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for KIAA0528 siRNA (h): sc-95830, 5730419I09Rik siRNA (m): sc-140378, KIAA0528 shRNA Plasmid (h): sc-95830-SH, 5730419I09Rik shRNA Plasmid (m): sc-140378-SH, KIAA0528 shRNA (h) Lentiviral Particles: sc-95830-V and 5730419I09Rik shRNA (m) Lentiviral Particles: sc-140378-V.

Molecular Weight of KIAA0528 isoforms: 115/110 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.

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.