

C12orf23 (D-12): sc-240020

BACKGROUND

C12orf23 (chromosome 12 open reading frame 23), also known as FLJ11721, FLJ13959 or MGC17943, is a 116 amino acid multi-pass membrane protein belonging to the UPF0444 family. C12orf23 is encoded by a gene located on human chromosome 12, which encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a number of skeletal deformities, 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.

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CHROMOSOMAL LOCATION

Genetic locus: C12orf23 (human) mapping to 12q23.3; AI597468 (mouse) mapping to 10 C1.

SOURCE

C12orf23 (D-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of C12orf23 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-240020 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

C12orf23 (D-12) is recommended for detection of AI597468 of mouse origin, C12orf23 of human origin and RGD1563325 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).

C12orf23 (D-12) is also recommended for detection of C12orf23 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for C12orf23 siRNA (h): sc-95775, AI597468 siRNA (m): sc-140947, C12orf23 shRNA Plasmid (h): sc-95775-SH, AI597468 shRNA Plasmid (m): sc-140947-SH, C12orf23 shRNA (h) Lentiviral Particles: sc-95775-V and AI597468 shRNA (m) Lentiviral Particles: sc-140947-V.

Molecular Weight of C12orf23: 12 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.