

# C12orf45 (C-14): sc-138152

## 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 C12orf45 gene product has been provisionally designated C12orf45 pending further characterization.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: C12orf45 (human) mapping to 12q23.3; D10Wsu102e (mouse) mapping to 10 C1.

## SOURCE

C12orf45 (C-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of C12orf45 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138152 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

C12orf45 (C-14) is recommended for detection of C12orf45 of human origin and D10Wsu102e of mouse origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other C12orf family members.

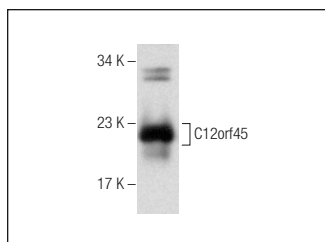
C12orf45 (C-14) is also recommended for detection of C12orf45 in additional species, including canine.

Suitable for use as control antibody for C12orf45 siRNA (h): sc-96037, D10Wsu102e siRNA (m): sc-142775, C12orf45 shRNA Plasmid (h): sc-96037-SH, D10Wsu102e shRNA Plasmid (m): sc-142775-SH, C12orf45 shRNA (h) Lentiviral Particles: sc-96037-V and D10Wsu102e shRNA (m) Lentiviral Particles: sc-142775-V.

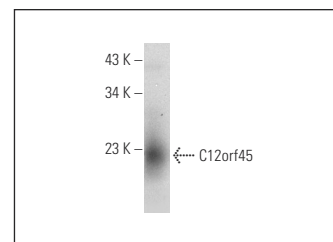
Molecular Weight of C12orf45: 20 kDa.

Positive Controls: Human pancreas extract: sc-363770 or mouse pancreas extract: sc-364244.

## DATA



C12orf45 (C-14): sc-138152. Western blot analysis of C12orf45 expression in human pancreas tissue extract.



C12orf45 (C-14): sc-138152. Western blot analysis of C12orf45 expression in mouse pancreas tissue extract.

## 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.