

LYRM5 (Y-12): sc-138977

BACKGROUND

LYRM5 (LYR motif-containing protein 5) is an 88 amino acid protein that belongs to the complex I LYR family and is encoded by a gene that maps to human chromosome 12p12.1. 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 which vary in severity depending on the extent of mosaicism. It is most severe in cases of complete trisomy.

REFERENCES

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- Stein, R. 2007. Genetics of Noonan syndrome-a new gene, and the search is still on. *Clin. Genet.* 72: 402-404.

CHROMOSOMAL LOCATION

Genetic locus: LYRM5 (human) mapping to 12p12.1; Lym5 (mouse) mapping to 6 G3.

SOURCE

LYRM5 (Y-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of LYRM5 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-138977 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LYRM5 (Y-12) is recommended for detection of LYRM5 of mouse, rat and human 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)], 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 LYRM family members.

Suitable for use as control antibody for LYRM5 siRNA (h): sc-95710, LYRM5 siRNA (m): sc-149187, LYRM5 shRNA Plasmid (h): sc-95710-SH, LYRM5 shRNA Plasmid (m): sc-149187-SH, LYRM5 shRNA (h) Lentiviral Particles: sc-95710-V and LYRM5 shRNA (m) Lentiviral Particles: sc-149187-V.

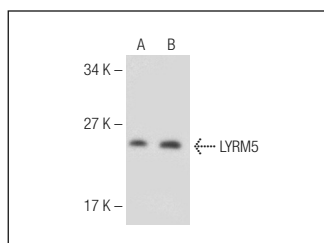
Molecular Weight of LYRM5: 11 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203 or U-87 MG cell lysate: sc-2411

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



LYRM5 (Y-12): sc-138977. Western blot analysis of LYRM5 expression in K-562 (A) and U-87 MG (B) whole cell lysates.

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.