

LYRM7 (T-15): sc-164946

BACKGROUND

LYRM7 (LYR motif-containing protein 7) is a 104 amino acid member of the complex I LYR family and is encoded by a gene located on human chromosome 5. With 181 million base pairs encoding around 1,000 genes, chromosome 5 is about 6% of human genomic DNA. Chromosome 5 is associated with Cockayne syndrome through the ERCC8 gene and familial adenomatous polyposis through the adenomatous polyposis coli (APC) tumor suppressor gene. Treacher Collins syndrome is also chromosome 5 associated and is caused by insertions or deletions within the TCOF1 gene. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome. Deletion of 5q or chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

REFERENCES

- Dixon, M.J., et al. 1991. The gene for Treacher Collins syndrome maps to the long arm of chromosome 5. *Am. J. Hum. Genet.* 49: 17-22.
- Saltman, D.L., et al. 1993. A physical map of 15 loci on human chromosome 5q23-q33 by two-color fluorescence *in situ* hybridization. *Genomics* 16: 726-732.
- Kadmon, M., et al. 2001. Duodenal adenomatosis in familial adenomatous polyposis coli. A review of the literature and results from the Heidelberg Polyposis Register. *Int. J. Colorectal Dis.* 16: 63-75.
- South, S.T., et al. 2006. A new genomic mechanism leading to Cri du chat syndrome. *Am. J. Med. Genet. A* 140: 2714-2720.
- Aretz, S., et al. 2007. Somatic APC mosaicism: a frequent cause of familial adenomatous polyposis (FAP). *Hum. Mutat.* 28: 985-992.
- Cleaver, J.E., et al. 2007. Cockayne syndrome exhibits dysregulation of p21 and other gene products that may be independent of transcription-coupled repair. *Neuroscience* 145: 1300-1308.
- Du, H.Y., et al. 2007. Telomerase reverse transcriptase haploinsufficiency and telomere length in individuals with 5p- syndrome. *Aging Cell* 6: 689-697.
- Herry, A., et al. 2007. Redefining monosomy 5 by molecular cytogenetics in 23 patients with MDS/AML. *Eur. J. Haematol.* 78: 457-467.
- Makrantonaki, E., et al. 2007. Molecular mechanisms of skin aging: state of the art. *Ann. N.Y. Acad. Sci.* 1119: 40-50.

CHROMOSOMAL LOCATION

Genetic locus: LYRM7 (human) mapping to 5q23.3; Lyrm7 (mouse) mapping to 11 B1.3.

SOURCE

LYRM7 (T-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of LYRM7 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-164946 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LYRM7 (T-15) is recommended for detection of LYRM7 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.

LYRM7 (T-15) is also recommended for detection of LYRM7 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for LYRM7 siRNA (h): sc-91683, LYRM7 siRNA (m): sc-149188, LYRM7 shRNA Plasmid (h): sc-91683-SH, LYRM7 shRNA Plasmid (m): sc-149188-SH, LYRM7 shRNA (h) Lentiviral Particles: sc-91683-V and LYRM7 shRNA (m) Lentiviral Particles: sc-149188-V.

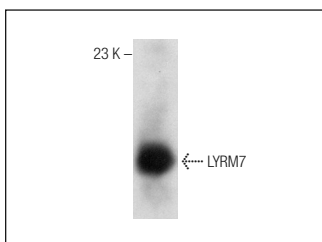
Molecular Weight of LYRM7: 12 kDa.

Positive Controls: mouse heart extract: sc-2254.

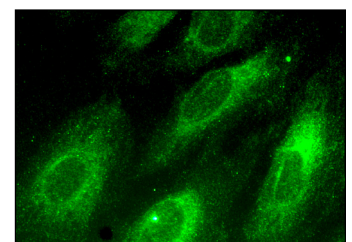
RECOMMENDED SECONDARY REAGENTS

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



LYRM7 (T-15): sc-164946. Western blot analysis of LYRM7 expression in mouse heart tissue extract.



LYRM7 (T-15): sc-164946. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

RESEARCH USE

For research use only, not for use in diagnostic procedures.