SANTA CRUZ BIOTECHNOLOGY, INC.

MLEC (C-17): sc-240686

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

MLEC (malectin) is a 292 amino acid single-pass type I membrane protein of the endoplasmic reticulum that belongs to the malectin family and is thought to play a role in N-glycosylation. MLEC may function as a carbohydrate-binding protein that preferentially binds Glc2-N-glycan. The gene encoding MLEC maps to human chromosome 12, which 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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CHROMOSOMAL LOCATION

Genetic locus: MLEC (human) mapping to 12q24.31; Mlec (mouse) mapping to 5 F.

RESEARCH USE

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

SOURCE

MLEC (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of MLEC 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-240686 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MLEC (C-17) is recommended for detection of MLEC of mouse, rat and human 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).

MLEC (C-17) is also recommended for detection of MLEC in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for MLEC siRNA (h): sc-95783, MLEC siRNA (m): sc-108740, MLEC shRNA Plasmid (h): sc-95783-SH, MLEC shRNA Plasmid (m): sc-108740-SH, MLEC shRNA (h) Lentiviral Particles: sc-95783-V and MLEC shRNA (m) Lentiviral Particles: sc-108740-V.

Molecular Weight of MLEC: 32 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.