

MASTL (C-16): sc-243417

BACKGROUND

MASTL (microtubule associated serine/threonine kinase-like), also known as GW, THC2 or serine/threonine-protein kinase greatwall, is an 879 amino acid serine/threonine kinase regulates mitosis entry and maintenance. Localizing to cytoplasm, nucleus and cytoskeleton, MASTL belongs to the AGC Ser/Thr protein kinase family and protein kinase superfamily. MASTL undergoes alternative splicing events to produce three isoforms and is phosphorylated post-translationally by Cdc2 p34. The gene encoding MASTL maps to human chromosome 10, which comprises approximately 4.5% of total DNA in cells and encodes nearly 1,200 genes. Defects in some of the genes that map to chromosome 10 are associated with Charcot-Marie Tooth disease, Jackson-Weiss syndrome, Usher syndrome, nonsyndromic deafness, Wolman's syndrome, Cowden syndrome, multiple endocrine neoplasia type 2 and porphyria.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: MASTL (human) mapping to 10p12.1; Mastl (mouse) mapping to 2 A3.

SOURCE

MASTL (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of MASTL 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-243417 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MASTL (C-16) is recommended for detection of MASTL 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); non cross-reactive with other MAST family members.

MASTL (C-16) is also recommended for detection of MASTL in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for MASTL siRNA (h): sc-90720, MASTL siRNA (m): sc-149290, MASTL shRNA Plasmid (h): sc-90720-SH, MASTL shRNA Plasmid (m): sc-149290-SH, MASTL shRNA (h) Lentiviral Particles: sc-90720-V and MASTL shRNA (m) Lentiviral Particles: sc-149290-V.

Molecular Weight of MASTL isoforms: 97/91/97 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.

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.