

MASTL (235CT7.8.2.3): sc-517343

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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STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

CHROMOSOMAL LOCATION

Genetic locus: MASTL (human) mapping to 10p12.1.

SOURCE

MASTL (235CT7.8.2.3) is a mouse monoclonal antibody raised against a recombinant protein corresponding to MASTL of human origin.

PRODUCT

Each vial contains 100 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

MASTL (235CT7.8.2.3) is recommended for detection of MASTL of 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)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

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

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

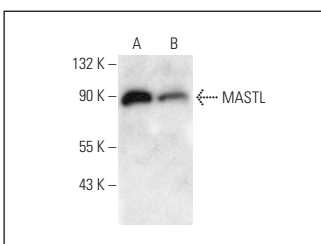
Positive Controls: Hep G2 cell lysate: sc-2227 or MDA-MB-435S whole cell lysate: sc-364184.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

- 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



MASTL (235CT7.8.2.3): sc-517343. Western blot analysis of MASTL expression in Hep G2 (A) and MDA-MB-435S (B) whole cell lysates.

RESEARCH USE

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