

MASTL

CONTACT INFORMATION: Monoclonal Antibodies Unit. Centro Nacional de Investigaciones Oncológicas
STATUS: Validated
TYPE: mouse anti human
CLONE NAME: RIPLY74C
PROTEIN: Microtubule associated serine/threonine kinase-like
PROTEIN WEB: <http://www.ncbi.nlm.nih.gov/protein/AAH09107.1>
ANTIGEN USED: GST-hMASTL recombinant full length protein
FUSION PARTNER: NS1/Ag4-1 (NS1) cells
ISOTYPE: IgG1
SPECIES REACTIVITY: Human and mouse
PREPARATION AND STORAGE: Aliquot and store at 4C. Do not freeze

DESCRIPTION

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. Depletion of MASTL delays the G2-to-M phase transition, is linked to a prolonged mitosis and sensitizes cells to mitotic death.

PUBLICATION DESCRIBING ANTIBODY CHARACTERIZATION/VALIDATION

Álvarez-Fernández M, Sanz-Flores M, Sanz-Castillo B, Salazar-Roa M, Partida D, Zapatero-Solana E, Ali HR, Manchado E, Lowe S, VanArsdale T, Shields D, Caldas C, Quintela-Fandino M, Malumbres M. Therapeutic relevance of the PP2A-B55 inhibitory kinase MASTL/Greatwall in breast cancer. *Cell Death Differ.* 2018 May;25(5):828-840.

APPLICATIONS

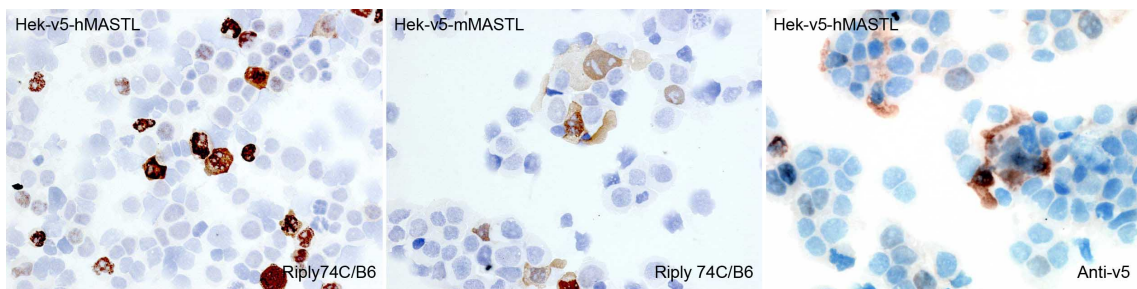
IHC Techniques	Clone	Dilution	Antibody concentration	Antigen retrieval method	Visualization kit	Positive control	Negative control	Protein localization	Positivity in other species
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Frozen tissue and cytopspins

Paraffin tissue

Recommended	RIPLY 74C	1:15	supernatant			Tonsil			mouse
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Immunofluorescence



RIPLY74C mAb in transfected cells

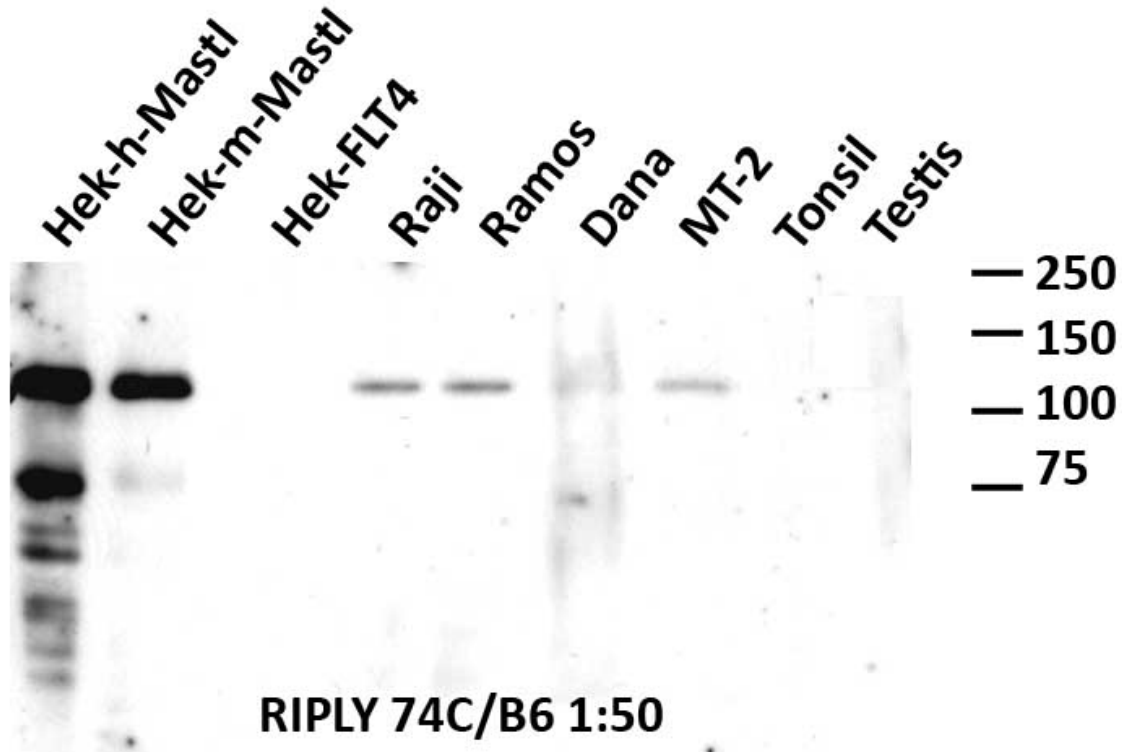
Cytopsin preparations of transfected HEK293T/v5-hMASTL and HEK293T/V5-mMASTL cells using antibody RIPLY74C. Anti-V5 antibody was used as positive control.

WB Techniques	Clone	Dilution	Antibody concentration	Positive control	Negative control	Expected MW	Observed Mw	Positivity in other species
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Western Blotting

Recommended	RIPLY74 C	1:50	neat supernatant	Raji cell line		97kDa	120kDa	
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Immunoprecipitation



Western Blotting of MAST (RIPLY74C) using different human cell lines.

Lane 1 Hek-hMASTL transfected cells (20ug) (+)

Lane 2 Hek-mMASTL transfected cells (20ug) (+)

Lane 3 Hek-FLT4 transfected cells (20ug) (-)

Lane 4 Raji cell line (100ug)(+)

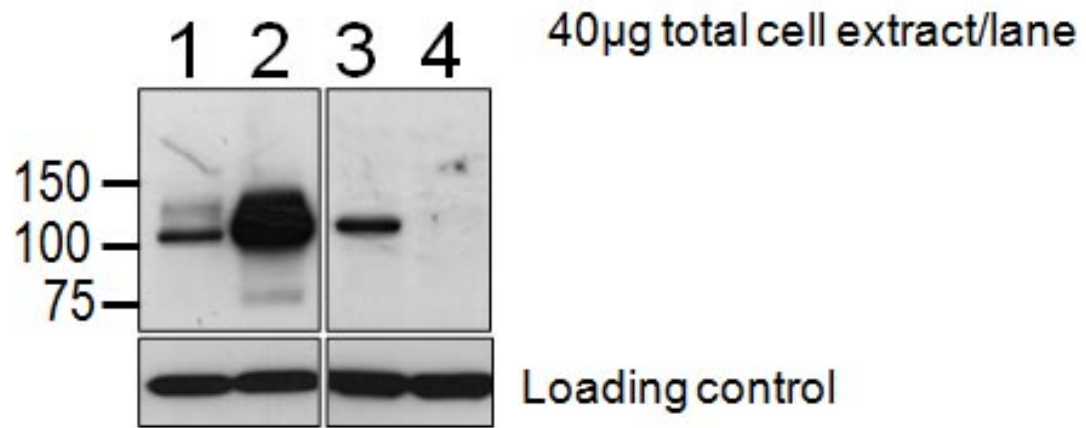
Lane 5 Ramos cell line (100ug)(+)

Lane 6 Dana cell line (100ug)(+)

Lane 7 MT-2 cell line (100ug)(+)

Lane 8 human tonsil (100ug)(-)

Lane 9 Human testis (100ug)(-)



Western Blotting of MASTL (RIPLY74C) using different cell lines

Lane 1 293T cell mock transfected (40ug)

Lane 2 293T cells V5-mMASTL (40ug)

Lane 3 HeLa cells shCtrl transfected (40ug)

Lane 4 HeLa cells shMASTL transfected (40ug)