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MASTL Antibody
Mouse Monoclonal Antibody (Mab)
Catalog # AM1911B

Specification

MASTL Antibody - Product Information

Application	**WB, IF,E**
Primary Accession	Q96GX5
Other Accession	NP_001165774.1
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1,k**

MASTL Antibody - Additional Information

Gene ID 84930

Other Names
Serine/threonine-protein kinase greatwall, GW, GWL, hGWL, Microtubule-associated serine/threonine-protein kinase-like, MAST-L, MASTL, GW, GWL, THC2

Target/Specificity
This MASTL monoclonal antibody is generated from mouse immunized with MASTL recombinant protein.

Dilution
WB~~1:500~1000
IF~~1:10~50
E~~Use at an assay dependent concentration.

Format
Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
MASTL Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

MASTL Antibody - Protein Information

Name MASTL

Synonyms GW, GWL, THC2

Function Serine/threonine kinase that plays a key role in M phase by acting as a regulator of mitosis entry and maintenance (PubMed:19680222). Acts by promoting the inactivation of protein phosphatase 2A (PP2A) during M phase: does not directly inhibit PP2A but acts by mediating phosphorylation and subsequent activation of ARPP19 and ENSA at 'Ser-62' and 'Ser-67', respectively (PubMed:38123684). ARPP19 and ENSA are phosphatase inhibitors that specifically inhibit the PPP2R2D (PR55-delta) subunit of PP2A. Inactivation of PP2A during M phase is essential to keep cyclin-B1-CDK1 activity high (PubMed:20818157). Following DNA damage, it is also involved in checkpoint recovery by being inhibited. Phosphorylates histone protein in vitro; however such activity is unsure in vivo. May be involved in megakaryocyte differentiation.

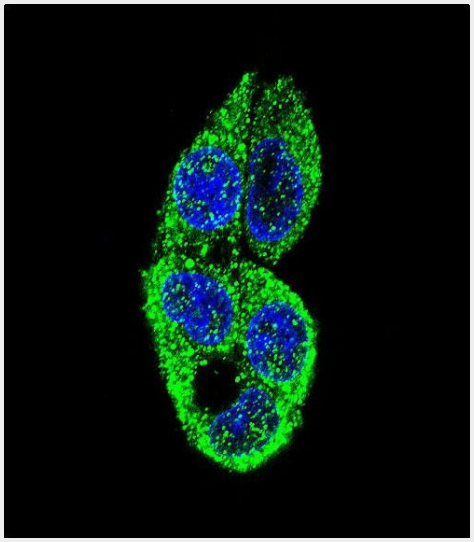
Cellular Location
Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Nucleus. Cleavage furrow. Note=During interphase is mainly nuclear, upon nuclear envelope breakdown localizes at the cytoplasm and during mitosis at the centrosomes. Upon mitotic exit moves to the cleavage furrow.

MASTL Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

MASTL Antibody - Images



Confocal immunofluorescent analysis of MASTL Antibody (Cat#AM1911b) with HepG2 cell followed by Alexa Fluor® 488-conjugated goat anti-mouse IgG (green). DAPI was used to stain the cell nuclear (blue).

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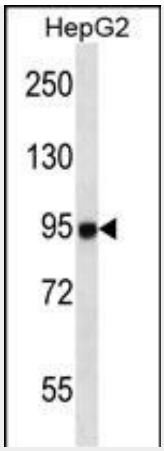

MASTL (Cat. #AM1911b) western blot analysis in HepG2 cell line lysates (35µg/lane).This demonstrates the MASTL antibody detected the MASTL protein (arrow).

MASTL Antibody - Background

This gene encodes a microtubule-associated serine/threonine kinase. Mutations at this locus have been associated with autosomal dominant thrombocytopenia, also known as thrombocytopenia-2. Alternatively spliced transcript variants have been described for this locus.

MASTL Antibody - References

Gandhi, M.J., et al. Hum. Hered. 55(1):66-70(2003)
Drachman, J.G., et al. Blood 96(1):118-125(2000)
Savoia, A., et al. Am. J. Hum. Genet. 65(5):1401-1405(1999)