

**MASTL Antibody**  
**Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM1911B**

**Specification**

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**MASTL Antibody - Product Information**

Application	IF, WB,E
Primary Accession	<a href="#">O96GX5</a>
Other Accession	<a href="#">NP_001165774.1</a>
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**

IF~~1:10~50  
WB~~1:500~1000

**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

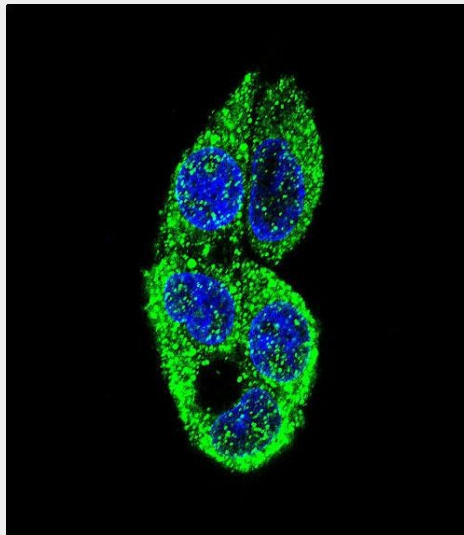
Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Nucleus. Cleavage furrow. Note=During interphase is mainly nuclear, upon nuclear envelope breakdown localizes at the cytoplasm and during mitosis at the centrosomes. Upon mitotic exit moves to the cleavage furrow.

#### MASTL Antibody - Protocols

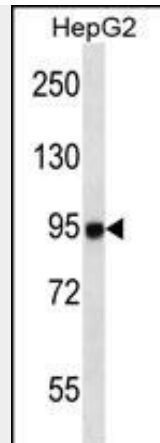
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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).



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)