

### MASTL Antibody

Mouse Monoclonal Antibody (Mab) Catalog # AM1911B

### Specification

# MASTL Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype IF, WB,E <u>Q96GX5</u> <u>NP\_001165774.1</u> Human Mouse Monoclonal 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. 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. 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. 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.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

MASTL Antibody - Images



Confocal immunofluorescent analysis of MASTL Antibody (Cat#AM1911b) with HepG2 cell followed by Alexa Fluor® 488-conjugated goat anti-mouse lgG (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)