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Mouse Mastl Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14289c

Product Information

Application	WB, E
Primary Accession	Q8C0P0
Other Accession	NP_080255.3
Reactivity	Human, Mouse
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB35078
Calculated MW	95975
Antigen Region	561-589

Additional Information

Gene ID	67121
Other Names	Serine/threonine-protein kinase greatwall, GW, GWL, Microtubule-associated serine/threonine-protein kinase-like, MAST-L, Mastl, Gw, Gwl
Target/Specificity	This Mouse Mastl antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 561-589 amino acids from the Central region of mouse Mastl.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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	Mouse Mastl Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Mastl
Synonyms	Gw, Gwl

Function	Serine/threonine kinase that plays a key role in M phase by acting as a regulator of mitosis entry and maintenance (PubMed:21156286). 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 (By similarity). 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 (By similarity). Following DNA damage, it is also involved in checkpoint recovery by being inhibited.
Cellular Location	Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Nucleus. Note=During interphase is mainly nuclear, upon nuclear envelope breakdown localizes at the cytoplasm and during mitosis at the centrosomes.

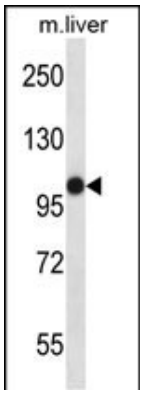
Background

Serine/threonine kinase. Mediates mitotic entry and maintenance. Maintains the correct equilibrium between cyclin B1-CDK1 and protein phosphatase 2A (PP2A) by promoting the inactivation of PP2A. Phosphorylates histone protein in vitro. May be involved in megakaryocyte differentiation (By similarity).

References

Zambrowicz, B.P., et al. Proc. Natl. Acad. Sci. U.S.A. 100(24):14109-14114(2003)
Stryke, D., et al. Nucleic Acids Res. 31(1):278-281(2003)
Piao, Y., et al. Genome Res. 11(9):1553-1558(2001)

Images



Mouse Mastl Antibody (Center) (Cat. #AP14289c) western blot analysis in mouse liver tissue lysates (35ug/lane).This demonstrates the Mastl antibody detected the Mastl protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.