

THC2 Polyclonal Antibody

Catalog # AP72825

Specification

THC2 Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host

WB, IHC-P 096GX5 Human, Mouse Rabbit **Polyclonal**

THC2 Polyclonal Antibody - Additional Information

Gene ID 84930

Other Names

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

Clonality

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

THC2 Polyclonal 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

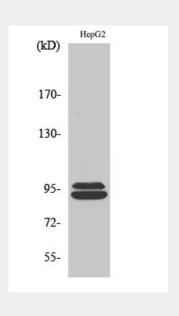
Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Nucleus. Cleavage furrow. Note=During interphase is mainly nuclear, upon nuclear envelope breakdown localizes at the cytoplasm and during mitosis at the centrosomes. Upon mitotic exit moves to the cleavage furrow.

THC2 Polyclonal Antibody - Protocols

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

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

THC2 Polyclonal Antibody - Images



THC2 Polyclonal Antibody - Background

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.