

## Summary

Production Name	Hamartin (7010) Rabbit Monoclonal Antibody
Description	Rabbit Monoclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human

#### Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	IgG
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% New type
Buffer	preservative N and 50% glycerol. Store at +4°C short term. Store at -20°C long term.
	Avoid freeze / thaw cycle.
Purification	Affinity purification

#### Immunogen

Gene Name	TSC1
Alternative Names	Hamartin; kiaa0243; LAM; TSC; Tsc1; Tuberous sclerosis 1;
Gene ID	7248.0
SwissProt ID	Q92574.

# Application

Dilution Ratio	WB 1:1000-1:5000
Molecular Weight	130kDa



#### Background

In complex with TSC2, inhibits the nutrient-mediated or growth factor-stimulated phosphorylation of S6K1 and EIF4EBP1 by negatively regulating mTORC1 signaling. Seems not to be required for TSC2 GAP activity towards RHEB. Implicated as a tumor suppressor. Involved in microtubule-mediated protein transport, but this seems to be due to unregulated mTOR signaling. In complex with TSC2, inhibits the nutrient-mediated or growth factor-stimulated phosphorylation of S6K1 and EIF4EBP1 by negatively regulating mTORC1 signaling (PubMed:<a href="http://www.uniprot.org/citations/12271141" target=" blank">12271141</a>, PubMed:<a href="http://www.uniprot.org/citations/28215400" target=" blank">28215400</a>). Seems not to be required for TSC2 GAP activity towards RHEB (PubMed:<a href="http://www.uniprot.org/citations/15340059" target=" blank">15340059</a>). Implicated as a tumor suppressor. Involved in microtubule-mediated protein transport, but this seems to be due to unregulated mTOR signaling (By similarity). Acts as a co- chaperone for HSP90AA1 facilitating HSP90AA1 chaperoning of protein clients such as kinases, TSC2 and glucocorticoid receptor NR3C1 (PubMed: <a href="http://www.uniprot.org/citations/29127155" target=" blank">29127155</a>). Increases ATP binding to HSP90AA1 and inhibits HSP90AA1 ATPase activity (PubMed:<a href="http://www.uniprot.org/citations/29127155" target=" blank">29127155</a>). Competes with the activating cochaperone AHSA1 for binding to HSP90AA1, thereby providing a reciprocal regulatory mechanism for chaperoning of client proteins (PubMed: <a href="http://www.uniprot.org/citations/29127155" target=" blank">29127155</a>). Recruits TSC2 to HSP90AA1 and stabilizes TSC2 by preventing the interaction between TSC2 and ubiquitin ligase HERC1 (PubMed:<a href="http://www.uniprot.org/citations/16464865" target=" blank">16464865</a>, PubMed:<a href="http://www.uniprot.org/citations/29127155" target=" blank">29127155</a>).

### **Research Area**

### Image Data



#### Western blot analysis of Hamartin expression in HeLa cell lysate.



#### Note

For research use only.