For Research Use Only

Phospho-MST1 (Thr183)/MST2 (Thr180) Polyclonal antibody



Catalog Number: 28953-1-AP

4 Publications

Basic Information

Catalog Number: 28953-1-AP Size: 400 µg/ml Source: Rabbit

Isotype: IgG GenBank Accession Number: BC005231

GeneID (NCBI): 6789 UNIPROT ID: Q13043

Full Name:

serine/threonine kinase 4

Calculated MW: 56 kDa Observed MW: 52-56 kDa Purification Method: Antigen affinity purification Recommended Dilutions:

WB 1:500-1:2000

Positive Controls:

WB: Staurosporine treated Ramos cells,

Applications

Tested Applications: WB, ELISA

Cited Applications:

WB

Species Specificity:

Human
Cited Species:
human, mouse

Background Information

Mammalian STE20-like serine-threonine kinase MST1, encoded by the STK4 gene, is a multifunctional protein. MST1 and its closest paralogs MST2 (encoded by the STK3 gene), MST3, and MST4 are members of the Class II Germinal Center Family of Protein Kinases. MST1/2 and LATS1/2 (large tumor suppressor 1 and 2) are core kinase components of the Hippo tumor suppressor pathway in mammalians. In the conventional Hippo pathway, the MST1/2 and LATS1/2 signaling cascade phosphorylates and inactivates the transcriptional coactivator YAP1 (yes associated protein 1) and its close paralog WWTR1]. YAP1 and WWTR1 do not have DNA binding domains and they exert their biological outputs, such as cell proliferation and survival, by interacting with the TEAD1-4 transcription factors. Lines of evidence have indicated that dysregulation or loss of STK4/Hippo signaling is linked to developmental disorders and carcinogenesis with poor prognosis. MST1 is a stress-induced kinase and it can be activated in response to cell-death inducers. Autophosphorylation of MST1 at Thr183 (Thr180 in MST2) in the activation loop is a key activation mechanism for MST1/2 because phosphorylation of Thr183/180 causes the cleavage of MST1 by caspases under apoptotic conditions.

Notable Publications

Author	Pubmed ID	Journal	Application
Jiamei Wu	38372068	J Cell Physiol	WB
Hualin Chen	37454211	Cell Death Dis	WB
Yifang Hu	37151881	Int J Biol Sci	WB

Storage

Storage

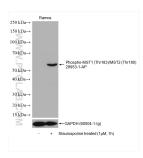
Store at -20°C. Stable for one year after shipment.

Storage Buffe

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Non-treated Ramos and Staurosporine treated Ramos cells were subjected to SDS PAGE followed by western blot with 28953-1-AP (Phospho-MST1 (Thr183)/MST2 (Thr180) antibody) at dilution of 1:1000 incubated at 4°C overnight. The membrane was stripped and re-blotted with GAPDH antibody as loading control.