

For Research Use Only

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

Catalog Number: 28953-1-AP

7 Publications



Basic Information

Catalog Number:

28953-1-AP

Size:

100ul, Concentration: 400 ug/ml by Nanodrop;

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

Applications

Tested Applications:

WB, ELISA

Cited Applications:

WB

Species Specificity:

Human

Cited Species:

human, mouse

Positive Controls:

WB : Staurosporine treated Ramos cells,

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 mammals. 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 |
|------------------|-----------|------------------------|-------------|
| Ning Nan | 39617260 | Toxicol Appl Pharmacol | WB |
| Michael R Weaver | 39554194 | bioRxiv | WB |
| Haihui Yu | 38824968 | Biochem Pharmacol | |

Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

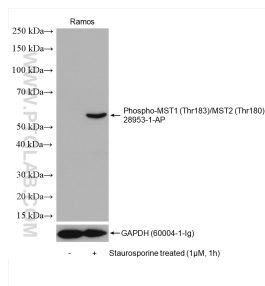
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Selected Validation Data



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.