For Research Use Only

CoraLite® Plus 488-conjugated Phospho-MST1 (Thr183)/MST2 (Thr180) Recombinant antibody

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Antibodies | ELISA kits | Proteins
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Catalog Number:CL488-80093

Basic Information

Catalog Number:
CL488-80093

Size:
100ul , Concentration: 1000 μg/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
BC005231

GeneID (NCBI):
6789

Full Name:
serine/threonine kinase 4

Calculated MW:
56 kDa

Observed MW:
59 kDa

Purification Method:
Protein A purification

CloneNo.:
1P6

Excitation/Emission maxima wavelengths:
488 nm / 515 nm

Applications

Tested Applications:
FC (Intra)

Species Specificity:
Human

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 . STK3/4 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 STK3/4 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. STK4 is a stress-induced kinase and it can be activated in response to cell-death inducers. Autophosphorylation of STK4 at Thr183 (Thr180 in STK3) in the activation loop is a key activation mechanism for STK4/3 because phosphorylation of Thr183/180 causes the cleavage of STK4 by caspases under apoptotic conditions. The caspase-cleavage results in a more active STK4 protein (STK4-N, an amino-terminally truncated STK4), which localizes into the nucleus and induces apoptosis through histone modifications and chromatin condensations.

Storage

Storage:
Store at -20°C. Avoid exposure to light.
Storage Buffer:
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.
Aliquoting is unnecessary for -20°C storage

***** 20ul sizes contain 0.1% BSA**

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
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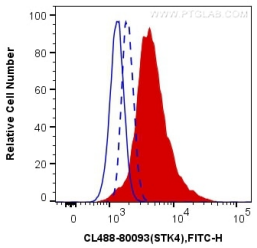
Selected Validation Data



1X10^6 HeLa cells untreated (dashed lines) or treated with Calyculin A (red) were intracellularly stained with 0.5 ug CoraLite® Plus 488 Anti-Human Phospho-MST1 (Thr183)/MST2 (Thr180) (CL488-80093, Clone:1P6), or 0.5 ug Control Antibody (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH.