For Research Use Only

## Phospho-MEK1 (Thr386) Recombinant antibody

Catalog Number:81304-1-RR

**Featured Product** 

1 Publications



**Basic Information** 

Catalog Number: 81304-1-RR

GenBank Accession Number:

BC139729

ENSG00000169032

**UNIPROT ID:** 

GeneID (NCBI):

100ul, Concentration: 1000 ug/ml by 5604 Nanodrop:

ENSEMBL Gene ID:

Source Rabbit

Isotype: IgG

Q02750 Full Name:

mitogen-activated protein kinase

kinase 1 Calculated MW: 43 kDa Observed MW:

40-50 kDa

**Applications** 

**Tested Applications:** 

WB, IF/ICC, FC (Intra), ELISA

Cited Applications:

Species Specificity:

human

Cited Species:

human

**Purification Method:** 

Protein A purification

CloneNo.: 6K5

Recommended Dilutions:

WB 1:5000-1:50000 IF/ICC 1:50-1:500

Positive Controls:

WB: HeLa cells, λ phosphatase treated HeLa cells

IF/ICC: λ phosphatase treated HeLa cells,

**Background Information** 

MAP2K1 encodes MAPK1, also known as MEK1. MEK1 variants can enhance MEK1 expression and ERK1 phosphorylation that together lead to continuous activation of MEK/ERK signaling pathway. MEK1 bind directly to ERK2 through a region in the N terminus of MEK. In addition, a proline-rich (PR) regulatory sequence in MEK is also involved in MEK-ERK association and signal propagation. The coupling between MEK1 and ERK2 is enhanced through phosphorylation on S298 in the MEK1 PR region, whereas phosphorylation on MEK1 T292 releases the complex. MEK1 T292 is a substrate of ERK2, but the site is also phosphorylated at a basal level when ERK2 is inhibited, suggesting several regulators of this site . Although the S298 site in MEK2 has been conserved, it lacks the T292  $\,$ phosphorylation site, and it is not a substrate of PAK1. (PMID: 31972311, PMID: 17928366, PMID: 22177953)

**Notable Publications** 

Author **Pubmed ID** Journal Application Jing Liu 39657505 **Biomed Pharmacother** WB

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

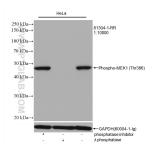
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

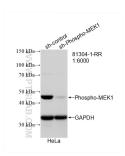
E: proteintech@ptglab.com W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

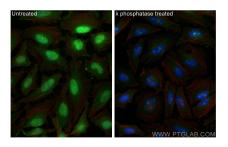
## **Selected Validation Data**



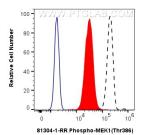
Non-treated HeLa cells, phosphatase inhibitor treated and  $\lambda$  phosphatase treated HeLa cells were subjected to SDS PAGE followed by western blot with 81304-1-RR (Phospho-MEK1 (Thr386) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH antibody as leading control loading control.



WB result of Phospho-MEK1 (Thr386) antibody (81304-1-RR; 1:6000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Phospho-MEK1 (Thr386) transfected HeLa cells.



Immunofluorescent analysis of (4% PFA) fixed  $\lambda$  phosphatase treated HeLa cells using Phospho-MEK1 (Thr386) antibody (81304-1-RR, Clone: 6K5) at dilution of 1:200 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). Phalloidin (red).



1X10^6 HeLa cells (dashed untreated ines) or treated with  $\lambda$  phosphatase which intracellularly stained with 0.06 ug Phospho-MEK1 (Thr386) Recombinant antibody (81304-1-RR, Clone:6K5) and CoraLite® 488-Conjugated Goat Anti-Rabbit 1gG(H+L) (SA00013-2)(red), or 0.06 ug Rabbit 1gG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH.