For Research Use Only

Phospho-MEK1 (Thr386) Recombinant antibody, PBS Only

Catalog Number:81304-1-PBS Featured Product

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Basic Information

Catalog Number:
81304-1-PBS

Size:
100ug , Concentration: 1mg/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
BC139729

GeneID (NCBI):
5604

ENSEMBL Gene ID:
ENSG00000169032

UNIPROT ID:
Q02750

Full Name:
mitogen-activated protein kinase kinase 1

Calculated MW:
43 kDa

Observed MW:
40-50 kDa

Purification Method:
Protein A purification

CloneNo.:
6K5

Applications

Tested Applications:
WB, IF/ICC, FC (Intra), Indirect ELISA

Species Specificity:
human

Background Information

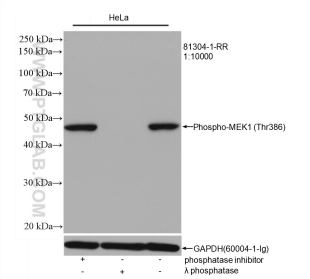
MAP2K1 encodes MAPK1, also known as MEK1. MEK1 variants can enhance MEK1 expression and ERK1 phosphorylation that together lead to continuous activation of MEK/ERK signaling pathway. MEK1 bind directly to ERK2 through a region in the N terminus of MEK. In addition, a proline-rich (PR) regulatory sequence 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)

Storage

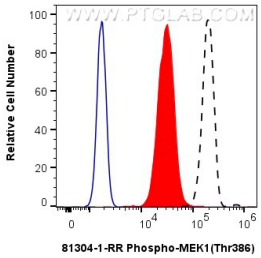
Storage:
Store at -80°C.
Storage Buffer:
PBS only, pH7.3

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

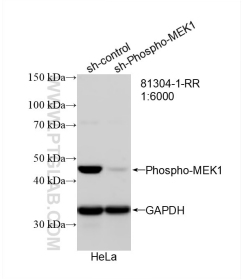
Selected Validation Data



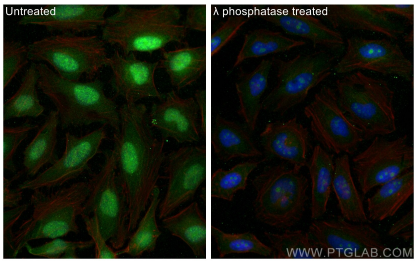
Non-treated HeLa cells, phosphatase inhibitor treated and λ phosphatase treated HeLa cells were subjected to SDS PAGE followed by western blot with 81304-1-RR (Phospho-MEK1 (Thr386) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH antibody as loading control. This data was developed using the same antibody clone with 81304-1-PBS in a different storage



1X10^6 HeLa cells (dashed untreated ines) or treated with λ 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 IgG(H+L) (SA00013-2)(red), or 0.06 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH. This data was developed



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. This data was developed using the same antibody clone with 81304-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed λ 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). This data was developed using the same antibody clone with 81304-1-PBS in a different storage buffer formulation.