For Research Use Only

Phospho-MEK1 (Thr292) Monoclonal antibody, PBS Only

Catalog Number:67873-1-PBS

Basic Information

Catalog Number:
67873-1-PBS

Size:
1mg/ml

Source:
Mouse

Isotype:
IgG1

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 G purification

CloneNo.:
2D7A8

Applications

Tested Applications:
WB, Indirect ELISA

Species Specificity:
Human, mouse, rat

Background Information

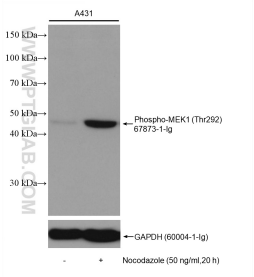
MAP2K1 encodes MAPK1, also known as MEK1. MEK1 variants can enhance MEK1 expression and ERK1 phosphorylation that together lead to continuous activation of MEK/ERK signaling pathway. MEK1 bind directly to ERK2 through a region in the N terminus of MEK. In addition, a proline-rich (PR) regulatory sequence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

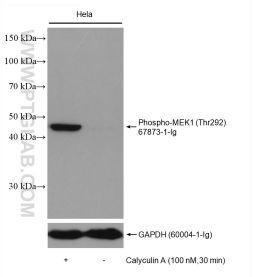
Storage:
Store at -80°C.
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C
Storage Buffer:
PBS Only

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

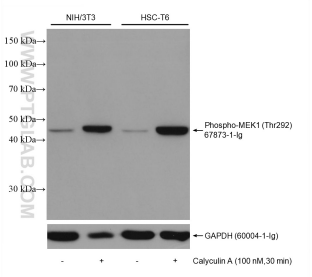
Selected Validation Data



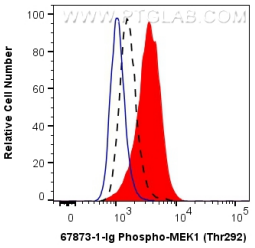
Non-treated A431 and Nocodazole treated A431 cells were subjected to SDS PAGE followed by western blot with 67873-1-Ig (Phospho-MEK1 (Thr292) antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH antibody as loading control. This data was developed using the same antibody clone with 67873-1-PBS in a different storage buffer formulation.



Non-treated HeLa and Calyculin A treated HeLa cells were subjected to SDS PAGE followed by western blot with 67873-1-Ig (Phospho-MEK1 (Thr292) antibody) at dilution of 1:5000 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 67873-1-PBS in a different storage buffer formulation.



Non-treated cells and Calyculin A treated cells were subjected to SDS PAGE followed by western blot with 67873-1-Ig (Phospho-MEK1 (Thr292) antibody) at dilution of 1:5000 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 67873-1-PBS in a different storage buffer formulation.



1X10^6 Calyculin A treated HeLa cells were intracellularly stained with 0.13 ug Anti-Human Phospho-MEK1 (Thr292) (67873-1-Ig, Clone:2D7A8) labeled with FlexAble CoraLite® Plus 555 Antibody Labeling Kit for Mouse IgG1 (KFA022). Cells were fixed with 4% PFA and permeabilized with 90% MeOH. This data was developed using the same antibody clone with 67873-1-PBS in a different storage buffer formulation.