For Research Use Only

Phospho-MEK1 (Ser298) Monoclonal antibody

Catalog Number:68047-1-Ig

3 Publications

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Basic Information

Catalog Number:
68047-1-Ig

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

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.:
3F10G10

Recommended Dilutions:
WB 1:5000-1:50000

Applications

Tested Applications:
WB, ELISA

Cited Applications:
WB

Species Specificity:
Human

Cited Species:
human, mouse

Positive Controls:

WB : HeLa cells, A431 cells, nocodazole treated A431 cells, Calyculin A 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
Chaoqun Li	35798541	ACS Appl Mater Interfaces	WB
Yanmei Peng	38383581	Exp Mol Med	WB
Hao Qin	37405911	Cell Rep	WB

Storage

Storage:
Store at -20°C.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol 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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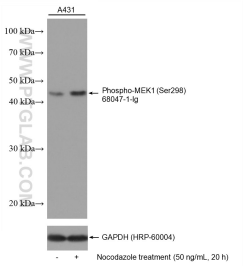
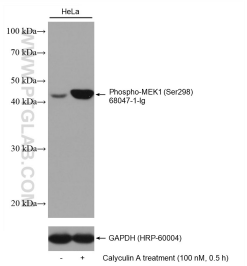
Selected Validation Data



Non-treated A431 cells and nocodazole treated A431 cells were subjected to SDS PAGE followed by western blot with 68047-1-Ig (Phospho-MEK1 (Ser298) 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.



Non-treated HeLa cells and Calyculin A treated HeLa cells were subjected to SDS PAGE followed by western blot with 68047-1-Ig (Phospho-MEK1 (Ser298) 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.