For Research Use Only

## Phospho-MEK1 (Ser298) Monoclonal antibody, PBS Only

www.ptglab.com

Catalog Number: 68047-1-PBS

**Basic Information** 

Catalog Number:

68047-1-PBS

100ug, Concentration: 1 mg/ml by

Nanodrop: Source:

Mouse Isotype: lgG1

GenBank Accession Number: BC139729

GeneID (NCBI):

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

**Applications** 

**Tested Applications:** 

WB, Indirect ELISA **Species Specificity:** 

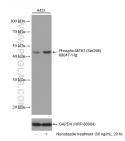
**Background Information** 

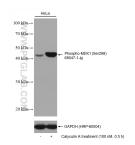
MAP2K1 encodes MAPK1, also known as MEK1. MEK1 variants can enhance MEK1 expression and ERK1 phosphorylation that together lead to continuous activation of MEK/ERK signaling pathway. MEK1 bind directly to ERK2 through a region in the N terminus of MEK. In addition, a proline-rich (PR) regulatory sequence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

## **Selected Validation Data**





Non-treated A431 cells and nocodazole treated A431 cells were subjected to SDS PAGE followed by western blot with 68047-1-lg (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. This data was developed using the same antibody clone with 68047-1-PBS in a different storage buffer formulation.

Non-treated HeLa cells and Calyculin A treated HeLa cells were subjected to SDS PAGE followed by western blot with 68047-1-lg (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. This data was developed using the same antibody clone with 68047-1-PBS in a different storage buffer formulation.