For Research Use Only

Phospho-MEK1 (Ser298) Recombinant antibody, PBS Only

Catalog Number:84691-1-PBS



Basic Information

Catalog Number:

84691-1-PBS

Size: 1 mg/ml

Source: Rabbit

Isotype:

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: 40-45 kDa Purification Method: Protein A purfication

CloneNo.: 241719G5

Applications

Tested Applications: WB, 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 enzymatic activity is regulated by site-specific phosphorylation that can be activated with phosphorylation of Ser217/Ser221 by Raf kinase or suppressed by phosphorylation of Thr286 and Thr292 by CDK1 and CDK5 or Thr292 and Thr386 by ERK1/2. (PMID: 31972311, PMID: 17928366, PMID: 22177953)

Storage

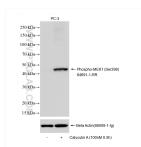
Storage:

Store at -80°C.

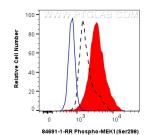
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

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Selected Validation Data



Non-treated and Calyculin A treated PC-3 cells were subjected to SDS PAGE followed by western blot with 84691-1-RR (Phospho-MEK1 (Ser298)) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with Beta Actin (66009-1-Ig) antibody as a loading control. This data was developed using the same antibody clone with 84691-1-PBS in a different storage buffer formulation.



1X10^6 HEK-293 cells untreated (dashed lines) or treated with Calyculin A which intracellularly stained with 0.13 ug Phospho-MEK1 (Ser298) Recombinant antibody (84691-1-RR, Clone: 244719G5) and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.13 ug Rabbit IgG Isotype Control RecAb (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH. This data was developed using the same antibody