For Research Use Only

CoraLite® Plus 488-conjugated Phospho-MEK1 (Thr292) Monoclonal antibody

Catalog Number:CL488-67873

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

Basic Information

Catalog Number:
CL488-67873

Concentration:
1000 μg/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

Recommended Dilutions:
FC (Intra): 0.25 ug per 10^6 cells in a 100 µl suspension

Excitation/Emission maxima wavelengths:
493 nm / 522 nm

Applications

Tested Applications:
FC (Intra)

Species Specificity:
human, mouse, rat

Positive Controls:

FC (Intra) : Calyculin A treated HeLa cells,

Background Information

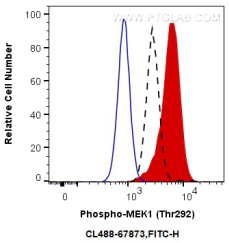
MAP2K1 encodes MAPK1, also known as MEK1. MEK1 variants can enhance MEK1 expression and ERK1 phosphorylation that together lead to continuous activation of MEK/ERK signaling pathway. MEK1 bind directly to ERK2 through a region in the N terminus of MEK. In addition, a proline-rich (PR) regulatory sequence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

Storage

Storage:
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.
Storage Buffer:
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3
Aliquoting is unnecessary for -20°C storage

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



1X10^6 HeLa cells untreated (dashed lines) or treated with Calyculin A (red) were intracellularly stained with 0.25 ug CoraLite® Plus 488 Anti-Human Phospho-MEK1 (Thr292) (CL488-67873, Clone:2D7A8), or 0.25 ug Control Antibody (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH.