

For Research Use Only



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

Catalog Number: **CL488-67873**

Basic Information

Catalog Number: CL488-67873	GenBank Accession Number: BC139729	Purification Method: Protein G purification
Size: 100ul , Concentration: 1000 ug/ml by Nanodrop;	GeneID (NCBI): 5604	CloneNo.: 2D7A8
Source: Mouse	ENSEMBL Gene ID: ENSG00000169032	Excitation/Emission maxima wavelengths: 493 nm / 522 nm
Isotype: IgG1	UNIPROT ID: Q02750	
	Full Name: mitogen-activated protein kinase kinase 1	
	Calculated MW: 43 kDa	
	Observed MW: 40-50 kDa	

Applications

Tested Applications:
FC (Intra)

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 -20°C. Avoid exposure to light. Stable for one year after shipment.

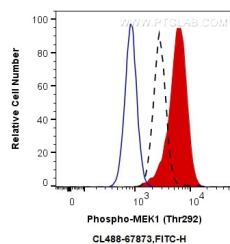
Storage Buffer:
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

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)
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This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

Selected Validation Data



1X10⁶ 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.