

For Research Use Only

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



Catalog Number: **CL488-67873**

## Basic Information

<b>Catalog Number:</b> CL488-67873	<b>GenBank Accession Number:</b> BC139729	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 100ul , Concentration: 1000 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 5604	<b>CloneNo.:</b> 2D7A8
<b>Source:</b> Mouse	<b>Full Name:</b> mitogen-activated protein kinase kinase 1	<b>Excitation/Emission maximum wavelengths:</b> 488 nm / 515 nm
<b>Isotype:</b> IgG1	<b>Calculated MW:</b> 43 kDa	
	<b>Observed MW:</b> 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

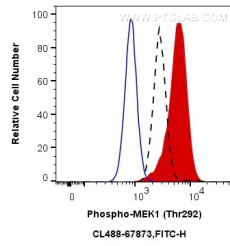
**Storage:**  
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 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](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

## Selected Validation Data



1X10<sup>6</sup> 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.