For Research Use Only

## CoraLite® Plus 488-conjugated Phospho-MEK1 (Thr386) Monoclonal antibody



Catalog Number: CL488-68015

**Basic Information** 

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1000 µg/ml Source:

Mouse Isotype: IgG1 GenBank Accession Number: BC 139729

GenelD (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.: 1G6A2

Recommended Dilutions: IF/ICC 1:50-1:500

Excitation/Emission maxima wavelengths:

493 nm / 522 nm

**Applications** 

**Tested Applications:** 

IF/ICC

Species Specificity: human, mouse

Positive Controls:

IF/ICC: 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

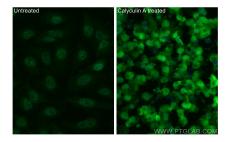
Storage:

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

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

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed Calyculin A treated HeLa cells using Coralite® Plus 488 Phospho-MEK1 (Thr386) antibody (CL488-68015, Clone: 1G6A2) at dilution of 1:200.