

For Research Use Only

# Phospho-MEK1 (Thr286) Recombinant antibody, PBS Only

Catalog Number: 80629-2-PBS



## Basic Information

<b>Catalog Number:</b> 80629-2-PBS	<b>GenBank Accession Number:</b> BC139729	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 5604	<b>CloneNo.:</b> 241910G6
<b>Source:</b> Rabbit	<b>ENSEMBL Gene ID:</b> ENSG00000169032	
<b>Isotype:</b> IgG	<b>UNIPROT ID:</b> Q02750	
	<b>Full Name:</b> mitogen-activated protein kinase kinase 1	
	<b>Calculated MW:</b> 43 kDa	
	<b>Observed MW:</b> 40-45 kDa	

## Applications

**Tested Applications:**  
WB, Indirect ELISA

**Species Specificity:**  
human, mouse

## 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

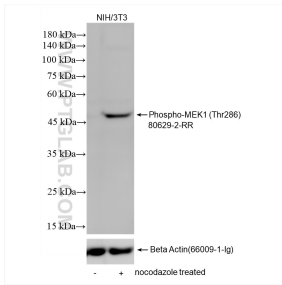
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

For technical support and original validation data for this product please contact:  
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## Selected Validation Data



Non-treated NIH/3T3 cells and nocodazole treated NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 80629-2-RR (Phospho-MEK1 (Thr286) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with Beta Actin (66009-1-Ig) antibody as loading control. This data was developed using the same antibody clone with 80629-2-PBS in a different storage buffer formulation.