

For Research Use Only

# Phospho-MEK1 (Thr292) Recombinant antibody, PBS Only

Catalog Number: 80629-3-PBS



## Basic Information

Catalog Number:	80629-3-PBS	GenBank Accession Number:	BC139729	Purification Method:
Size:	100ug, Concentration: 1 mg/ml by Nanodrop;	GenID (NCBI):	5604	CloneNo.:
Source:	Rabbit	ENSEMBL Gene ID:	ENSG00000169032	250282F6
Isotype:	IgG	UNIPROT ID:	Q02750	
		Full Name:	mitogen-activated protein kinase kinase 1	
		Calculated MW:	43 kDa	
		Observed MW:	45-50 kDa	

## Applications

### Tested Applications:

WB, Indirect ELISA

### Species Specificity:

human

## 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 binds 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 -80°C.

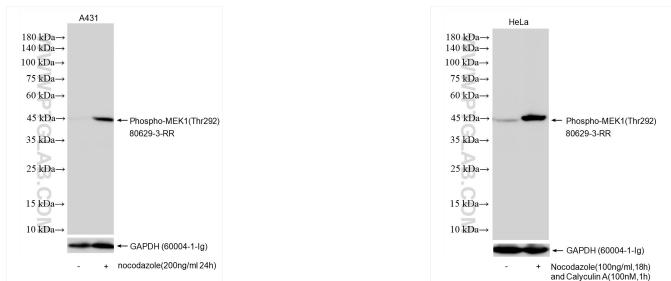
### Storage Buffer:

PBS only, pH7.3

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  
W: ptglab.com

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## Selected Validation Data



Non-treated and Nocodazole treated A431 cells were subjected to SDS PAGE followed by western blot with 80629-3-RR (Phospho-MEK1 (Thr292) antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH (60004-1-Ig) antibody as a loading control. This data was developed using the same antibody clone with 80629-3-PBS in a different storage buffer formulation.

Non-treated HeLa cells, Nocodazole and Calyculin A treated HeLa cells were subjected to SDS PAGE followed by western blot with 80629-3-RR (Phospho-MEK1 (Thr292) antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH (60004-1-Ig) antibody as a loading control. This data was developed using the same antibody clone with 80629-3-PBS in a different storage buffer formulation.