

For Research Use Only

# Phospho-MEK1 (Thr292) Recombinant antibody

Catalog Number: 80629-3-RR



## Basic Information

Catalog Number:	80629-3-RR	GenBank Accession Number:	BC139729	Purification Method:	Protein A purification
Size:	100ul, Concentration: 1000 µg/ml by Nanodrop;	GenID (NCBI):	5604	CloneNo.:	250282F6
Source:	Rabbit	ENSEMBL Gene ID:	ENSG00000169032	Recommended Dilutions:	WB: 1:1000-1:4000
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, ELISA	Positive Controls:	WB: nocodazole treated A431 cells, Nocodazole and Calyculin A treated HeLa cells, A431 cells
Species Specificity:	human		

## Background Information

MAP2K1 encodes MAPK1, also known as MEK1. MEK1 variants can enhance MEK1 expression and ERK 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 MEK1. In addition, a proline-rich (PR) regulatory sequence in MEK1 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

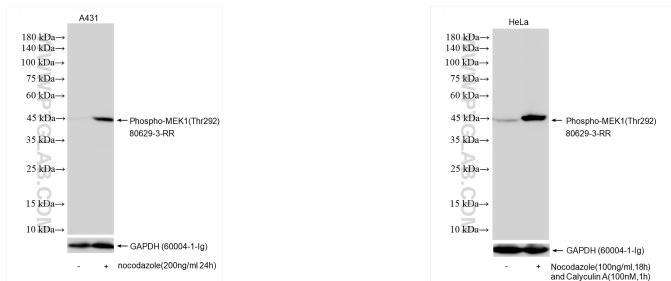
Storage: Store at -20°C. Stable for one year after shipment.  
Storage Buffer: PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
Aliquoting is unnecessary for -20°C storage

\*\*\* 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  
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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.

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.