## For Research Use Only

## Phospho-MEK1 (Thr386) Monoclonal antibody

Catalog Number:68015-1-lg

1 Publications



<b>Basic Information</b>	Catalog Number: 68015-1-lg	GenBank Accession Number: BC 139729		Purification Method: Protein G purification	
	Size:	GenelD (NCBI): 5604		CloneNo.: 1G6A2	
	1000 ug/ml				
	Source:	ENSEMBL Gene ID: ENSG00000169032 UNIPROT ID:		Recommended Dilutions: WB 1:5000-1:50000 IF/ICC 1:200-1:800	
	Mouse				
	lsotype: lgG1				
		Q02750 Full Name: mitogen-activated protein kinase kinase 1 Calculated MW: 43 kDa Observed MW: 40-50 kDa			
Applications	Tested Applications: F		Positive	Positive Controls:	
	WB, IF/ICC, ELISA		WB : HeLa	cells, HEK-293 cells, A431 cells, NIH/3T3	
	Cited Applications:		cells, nocodazole treated HEK-293 cells, nocodazole		
	WB	WB treated A431 cells, Calyculin A   Species Specificity: Calyculin A treated HeLa cells   human, mouse HeLa cells		431 cells, Calyculin A treated NIH/3T3 cells,	
	Species Specificity:			n A treated HeLa cells, $\lambda$ phosphatase treated	
	Cite d Creation				
	human, mouse		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)				
Notable Publications	Author	Pubmed ID	Journal	Application	
	Hao Qin	37405911	Cell Rep	WB	
Storage	Storage: Store at -20°C. Stable for on Storage Buffer: PBS with 0.02% sodium aziv Aliquoting is unnecessary fr	e year after shipment. de and 50% glycerol pl- or - 20°C storage	17.3.		

For technical support and original validation data for this product please contact:T: 4006900926E: Proteintech-CN@ptglab.comW: ptgcn.com

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## Selected Validation Data



Non-treated NIH/3T3 cells and Calyculin A treated NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 68015-1-1g (Phospho-MEK1 (Thr386) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH antibody as loading control.



Non-treated HeLa cells and Calyculin A treated HeLa cells were subjected to SDS PAGE followed by western blot with 68015-1-lg (Phospho-MEK1 (Thr386) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH antibody as loading control.



Non-treated HeLa cells, phosphatase inhibitor treated and  $\lambda$  phosphatase treated HeLa cells were subjected to SDS PAGE followed by western blot with 68015-1-Ig (Phospho-MEK1 (Thr386) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed Calyculin A treated HeLa cells using Phospho-MEK1 (Thr386) antibody (68015-1-1g, Clone: 1C6A2) at dilution of 1:400 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (RGAM002).