For Research Use Only

ERK-MAPK Pathway Antibody Kit

Catalog Number: PK30019

www.ptglab.com

Description

The ERK-MAPK Pathway Antibody Kit provides a cost-effective tool for studying key phospho-proteins invovled in various steps of the ERK-MAPK pathway. Perfect for signal transdcution researchers starting a new project, screening multiple prospective targets, or those who simply require less volume.

Product Information

The ERK-MAPK Pathway Antibody Kit contains antibodies against 5 key phospho-protein targets that play critical roles in the ERK-MAPK pathway.

Antigen	Catalog No.	Host, clonality	Tested Reactivity	Applications	Volume
Phospho-MEK1 (Thr292)	67873-1-Ig	Mouse monoclonal	H, M, R	WB, FC	20 uL
Phospho-ERK1/2 (Thr202/Tyr204)	80031-1-RR	Rabbit Monoclonal	H	WB	20 uL
Phospho-RPS6KA1 (Ser380)	80108-1-RR	Rabbit Monoclonal	H, M	WB, IHC, FC	20 uL
Phospho-Jun (Ser73)	80086-1-RR	Rabbit Monoclonal	H, M	WB	20 uL
Phospho-MNK1 (Thr250/255)	81398-1-RR	Rabbit Monoclonal	H	WB	20 uL

Package

5×20 uL

Storage

Store at -20°C. Stable for one year from the date of receipt.

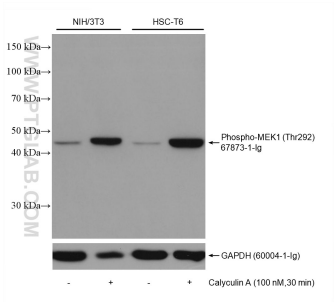
Background Information

The ERK-MAPK signaling pathway regulates several improtant cellular processes including proliferation, differentiation, and survival in response to extracellular signals such as growth factor/hormone stimulation and environmental stress. The pathway is strcutured into several tiers in which protein kinases sequentially phosphorylate each other, resulting in the activation of gene expression downstream. Phospho-MEK1 is a MAP2K that phosphorylates and activates ERK1/2 at several sites including Thr202/Tyr204. Once activated, the phosphorylated-ERK translocates to the nucleus and then phosphorylates several transcription factors downstream including c-Jun, c-Myc, STAT, and HIF1. Ser/Thr kinases such as p90RSK/RPS6KA1 and MNK1 can also be phsophorylated by ERK, resulting in the activation of additional transcritption factors and translation factors respectively.

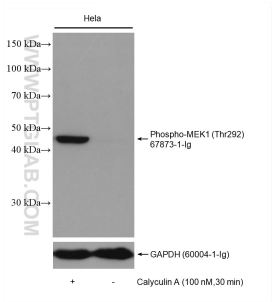
Standard Protocols

Click here to view our standard protocols for various applications including WB, IP, IHC, IF, FC, and ELISA.

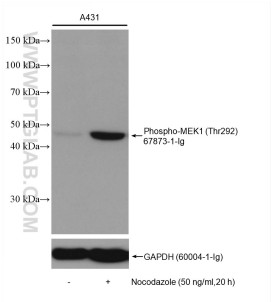
Validation Data



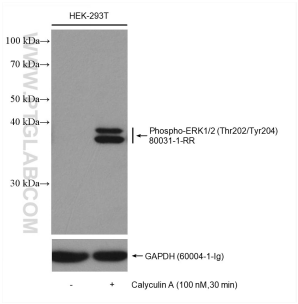
Non-treated cells and Calyculin A treated cells were subjected to SDS PAGE followed by western blot with 67873-1-Ig (Phospho-MEK1 (Thr292) antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH antibody as loading control.



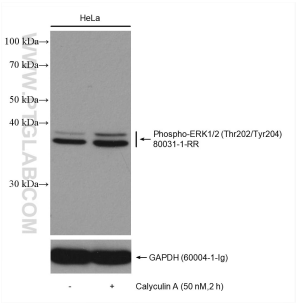
Non-treated HeLa and Calyculin A treated HeLa cells were subjected to SDS PAGE followed by western blot with 67873-1-Ig (Phospho-MEK1 (Thr292) antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH antibody as loading control.



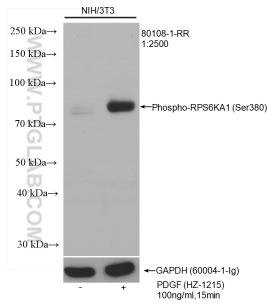
Non-treated A431 and Nocodazole treated A431 cells were subjected to SDS PAGE followed by western blot with 67873-1-Ig (Phospho-MEK1 (Thr292) antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH antibody as loading control.



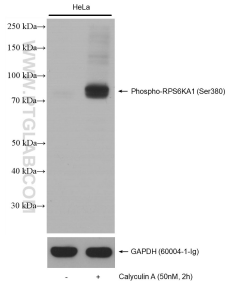
Non-treated HEK-293T and Calyculin A treated HEK-293T cells were subjected to SDS PAGE followed by western blot with 80031-1-RR (Phospho-ERK1/2 (Thr202/Tyr204) antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



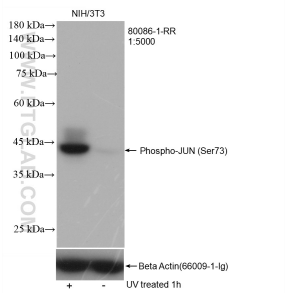
Non-treated HeLa and Calyculin A treated HeLa cells were subjected to SDS PAGE followed by western blot with 80031-1-RR (Phospho-ERK1/2 (Thr202/Tyr204) antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



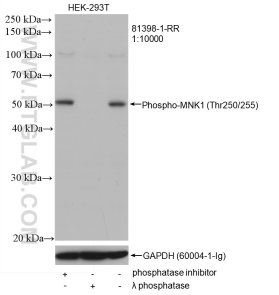
Non-treated NIH/3T3 and PDGF (HZ-1215) treated NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 80108-1-RR (Phospho-RPS6KA1 (Ser380) antibody) at dilution of 1:2500 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH antibody as loading control.



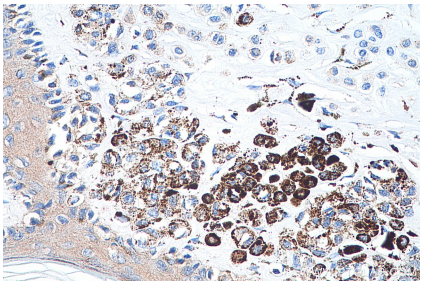
Non-treated HeLa cells and Calyculin A treated HeLa cells were subjected to SDS PAGE followed by western blot with 80108-1-RR (Phospho-RPS6KA1 (Ser380) antibody) at dilution of 1:2500 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH antibody as loading control.



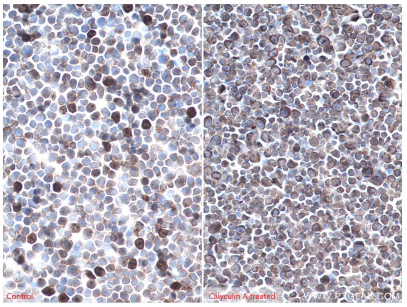
UV treated and non-treated NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 80086-1-RR (Phospho-JUN (Ser73) antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with Beta Actin antibody (66009-1-Ig) as loading control.



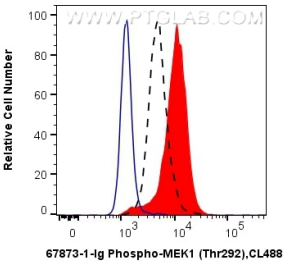
Non-treated HEK-293T cells, phosphatase inhibitor and λ phosphatase treated HEK-293T cells were subjected to SDS PAGE followed by western blot with 81398-1-RR (Phospho-MNK1 (Thr250/255) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH antibody as... loading control.



Immunohistochemical analysis of paraffin-embedded human malignant melanoma tissue slide using 80108-1-RR (Phospho-RPS6KA1 (Ser380) antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded Jurkat cells slide using 80108-1-RR (Phospho-RPS6KA1 (Ser380) antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10^6 HeLa cells untreated (dashed lines) or Calyculin A (red) treated were intracellularly stained with 0.13 ug Anti-Human Phospho-MEK1 (Thr292) (67873-1-Ig, Clone:2D7A8) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000, or 0.13 ug

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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