For Research Use Only

AKT Activation Antibody Kit

Catalog Number: PK30020

www.ptglab.com

Description

The AKT Activation Antibody Kit provides a cost-effective tool for studying key phospho-proteins involved in the activation steps of the AKT pathway. Perfect for signal transduction researchers starting a new project, screening multiple prospective targets, or those who simply require less volume.

Product Information

The AKT Activation Antibody Kit contains antibodies against 5 key phospho-protein targets that play critical roles in AKT pathway activation.

Antigen	Catalog No.	Host, clonality	Tested Reactivity	Applications	Volume
Phospho-PDPK1 (Ser241)	29241-1-AP	Rabbit Polyclonal	H, M	WB	20 uL
Phospho-PTEN (Thr382/383)	29246-1-AP	Rabbit Polyclonal	H, M	WB	20 uL
Phospho-AKT (Ser473)	80455-1-RR	Rabbit Monoclonal	H	WB	20 uL
Phospho-AKT (Thr308)	29163-1-AP	Rabbit Polyclonal	H	WB	20 uL
AKT	60203-2-Ig	Mouse Monoclonal	H, M, R	WB, IP, IHC, IF	20 uL

Package

5×20 uL

Storage

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

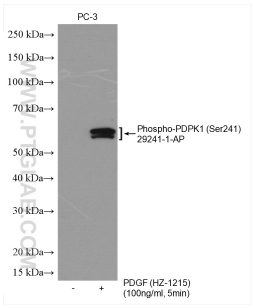
Background Information

AKT, also known as protein kinase B, is a serine/threonine kinase that anchors a number of signaling pathways involved in regulating cell growth, proliferation, metabolism, mobility, and apoptosis. It is activated through phosphorylation at two sites (Ser473 and Thr308) by PDK1, which itself is rendered functionally active after begins phosphorylated at the Ser241 residue. Alternatively, AKT activity can be inhibited by PTEN which dephosphorylates PIP3, thereby preventing the activation of PDK1. However, phosphorylation of PTEN at Thr382/383 results in a loss of its phosphatase activity and tumor suppressor function. This can allow for increased AKT pathway activation in several different cancer types.

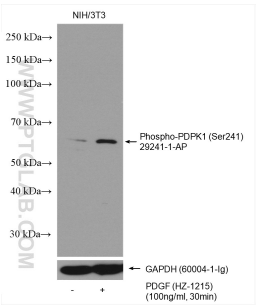
Standard Protocols

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

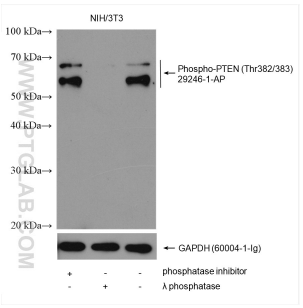
Validation Data



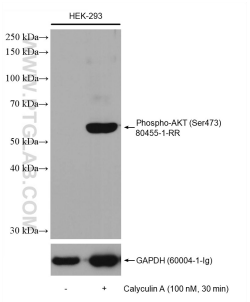
Non-treated PC-3 and PDGF (HZ-1215) treated PC-3 cells were subjected to SDS PAGE followed by western blot with 29241-1-AP (Phospho-PDPK1 (Ser241) antibody) at dilution of 1:1000 incubated at 4°C overnight.



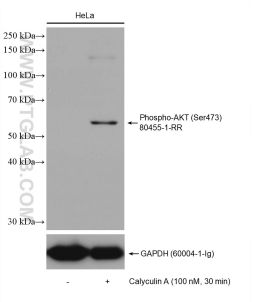
Non-treated NIH/3T3 and PDGF (HZ-1215) treated NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 29241-1-AP (Phospho-PDPK1 (Ser241) antibody) at dilution of 1:2000 incubated at 4°C overnight. The membrane was stripped and re-blotted with GAPDH antibody as loading control.



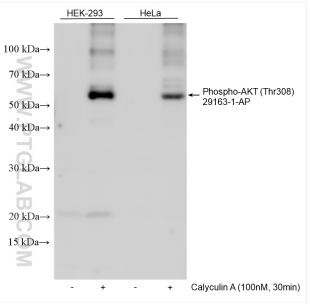
Non-treated NIH/3T3, phosphatase inhibitor treated and λ phosphatase treated NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 29246-1-AP (Phospho-PTEN (Thr382/383) antibody) at dilution of 1:5000 incubated at room temperature for 1 hours. The membrane was stripped and re-blotted with GAPDH antibody as... loading control.



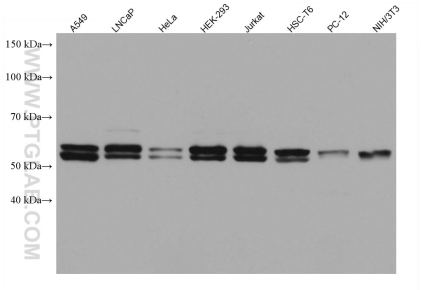
Non-treated and Calyculin A treated HEK-293 cells were subjected to SDS PAGE followed by western blot with 80455-1-RR (Phospho-AKT (Ser473) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH antibody as loading control.



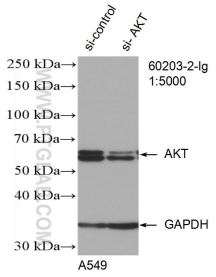
Non-treated and Calyculin A treated HeLa cells were subjected to SDS PAGE followed by western blot with 80455-1-RR (Phospho-AKT (Ser473) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH antibody as loading control.



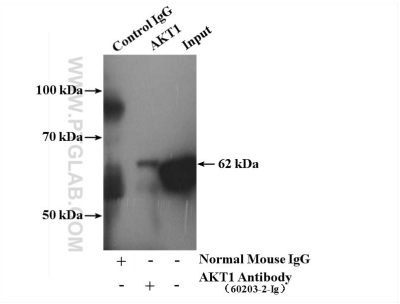
Non-treated and Calyculin A treated cells were subjected to SDS PAGE followed by western blot with 29163-1-AP (Phospho-AKT (Thr308) antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



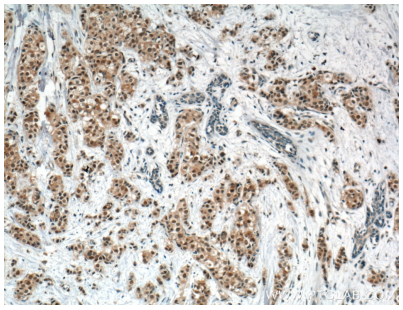
Various lysates were subjected to SDS PAGE followed by western blot with 60203-2-Ig (AKT antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



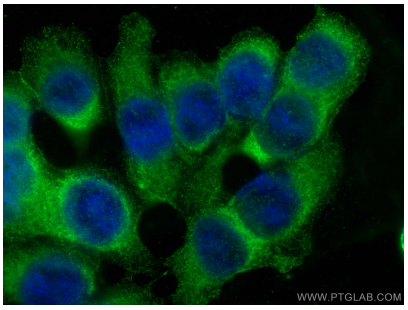
WB result of AKT antibody (60203-2-Ig; 1:5000; incubated at room temperature for 1.5 hours) with sh-Control and sh-AKT transfected A549 cells.



IP result of anti-AKT (IP:60203-2-Ig, 5ug; Detection:60203-2-Ig 1:1000) with mouse brain tissue lysate 4000ug.



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 60203-2-Ig (AKT Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) fixed MCF-7 cells using AKT antibody (60203-2-Ig, Clone: 2C5D1) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).

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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