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PACSIN3 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8089a

Product Information

Application	IHC-P, WB, E
Primary Accession	Q9UKS6
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB3577
Calculated MW	48487
Antigen Region	1-30

Additional Information

Gene ID	29763
Other Names	Protein kinase C and casein kinase substrate in neurons protein 3, SH3 domain-containing protein 6511, PACSIN3
Target/Specificity	This PACSIN3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human PACSIN3.
Dilution	IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PACSIN3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PACSIN3
Function	Plays a role in endocytosis and regulates internalization of plasma membrane proteins. Overexpression impairs internalization of SLC2A1/GLUT1 and TRPV4 and increases the levels of SLC2A1/GLUT1 and TRPV4 at the cell membrane. Inhibits the TRPV4 calcium channel activity (By similarity).

Cellular Location	Cytoplasm. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Note=Detected at the inner aspect of the plasma membrane in myotubes.
Tissue Location	Widely expressed, with highest levels in heart and skeletal muscle, intermediate levels in placenta, liver and pancreas, and very low levels in brain, lung and kidney

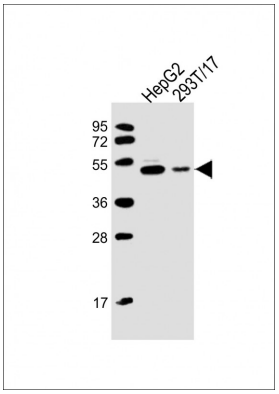
Background

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the g phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. The STE group (homologs of yeast Sterile 7, 11, 20 kinases) consists of 50 kinases related to the mitogen-activated protein kinase (MAPK) cascade families (Ste7/MAP2K, Ste11/MAP3K, and Ste20/MAP4K). MAP kinase cascades, consisting of a MAPK and one or more upstream regulatory kinases (MAPKKs) have been best characterized in the yeast pheromone response pathway. Pheromones bind to Ste cell surface receptors and activate yeast MAPK pathway.

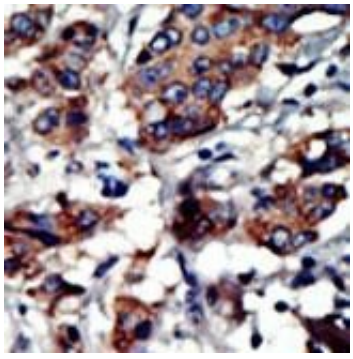
References

Howard, L., et al., J. Biol. Chem. 274(44):31693-31699 (1999). Modregger, J., et al., J. Cell. Sci. 113 Pt 24, 4511-4521 (2000). Sumoy, L., et al., Gene 262 (1-2), 199-205 (2001).

Images



All lanes : Anti-PACSIN3 Antibody (M1) at 1:2000 dilution Lane 1: HepG2 whole cell lysate Lane 2: 293T/17 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 48 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.