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Anti-Vav2 (Tyr-142) [conserved site], Phosphospecific Antibody

Catalog # AN2009

Product Information

Application	WB, ICC
Primary Accession	Q60992
Host	Rabbit
Clonality	Rabbit Polyclonal
Isotype	IgG
Calculated MW	99915

Additional Information

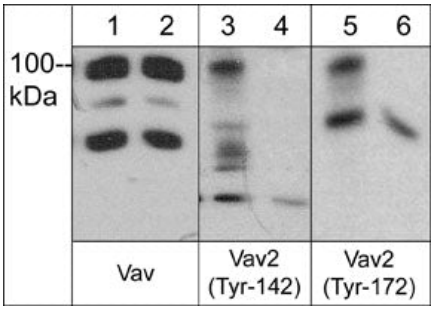
Gene ID	22325
Other Names	VAV2, Guanine nucleotide exchange factor VAV2
Dilution	WB~~1:1000 ICC~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Anti-Vav2 (Tyr-142) [conserved site], Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

Background

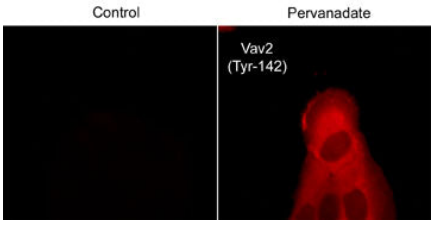
The Vav family of Rho-guanine nucleotide exchange factors, Vav1, Vav2, and Vav3, have central roles in transducing signals from cell surface receptors, such as integrin, growth factor and immune cell receptors to the cytoskeleton. This role includes receptor-mediated changes in the actin cytoskeleton and cell motility. Vav1 expression is normally restricted to hematopoietic cells, while Vav2 and Vav3 are more widely expressed. All three Vav isoforms have been shown to be abnormally expressed in several types of cancer. Vavs are composed of multiple domains, including a Dbl homology domain, a calponin homology domain, an acidic amino acid region, a pleckstrin homology domain, a cysteine-rich domain, and SH3 and SH2 domains. Vav activity is regulated by the phosphorylation status of several conserved tyrosine residues in the acidic region (In Vav2: Tyr-142, Tyr-159, and Tyr-172). These tyrosine residues are able to participate in autoinhibitory interactions with the Dbl homology domain and this interaction is prevented after phosphorylation of these sites leading to activation of Vav GEF activity.

Images

Western blot of human A431 cells treated with EGF (lanes 1, 3, & 5) then the blot was exposed to alkaline



phosphatase (lanes 2, 4, & 6). The blots were probed with anti-Vav (a.a. 165-174) (lanes 1 & 2), anti-Vav2 (Tyr-142) (lanes 3 & 4), or anti-Vav2 (Tyr-172) (lanes 5 & 6).



Immunocytochemical labeling of VAV2 in control and pervanadate-treated human A431 cells. The cells were fixed in paraformaldehyde and permeabilized using NP-40. Then labeled with rabbit polyclonal Vav2 (Tyr-142). The antibody was detected using goat anti-rabbit DyLight® 594.