

Anti-WAVE1 (N-terminal region) Antibody

Catalog # AN2022

Product Information

Application	WB, ICC
Primary Accession	Q92558
Host	Rabbit
Clonality	Rabbit Polyclonal
Isotype	IgG
Calculated MW	61652

Additional Information

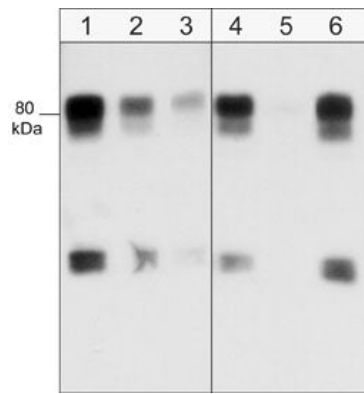
Gene ID	8936
Other Names	Wiskott-Aldrich syndrome verproline, Scar1, WASF1
Dilution	WB~~1:1000 ICC~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Anti-WAVE1 (N-terminal region) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

Background

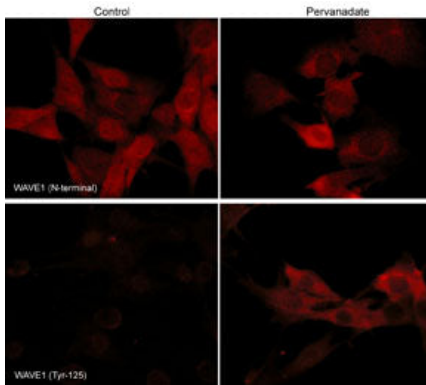
The Wiskott-Aldrich syndrome protein (WASP) family is involved in various pathways that regulate actin cytoskeletal organization. This family includes WASP, N-WASP, and three WAVE/SCAR isoforms, WAVE1, 2, and 3. WAVE proteins play key roles in actin-mediated cell events, such as membrane ruffling and lamellipodia formation. WAVES contain an N-terminal WAVE homology domain, a basic domain, a Proline-rich region, and carboxy terminal verprolin, cofilin, and acidic (VCA) region. WAVES are thought to act downstream of the Rac GTPase, connecting Rac activation to induction of Arp 2/3-mediated actin polymerization. Regulation of WAVE activity can occur through tyrosine phosphorylation. Src phosphorylation of WAVE1 at Tyr-125 enhances binding to the Arp2/3 complex, and is required for WAVE inhibition of Arp2/3-mediated stress fiber formation. By contrast, WAVE2 phosphorylation of Tyr-150 by Abl may enhance Arp2/3 complex actin nucleation and microspike formation in fibroblasts. Thus, site-specific tyrosine phosphorylation may be important for controlling specific activities of WAVE proteins.

Images

Western blot of human SYF cSrc-transformed cells. Blots were probed with anti-WAVE1 (N-terminal region) at a dilution of 1:1000 (lane 1), 1:2000 (lane 2) or 1:4000 (lane 3). In addition, the antibody was used in the



absence (lane 4) or presence of blocking peptides, WAVE1 (N-terminal region) peptide (lane 5) or WAVE2 (Central region) peptide (lane 6).



Immunocytochemical labeling of phosphorylated WAVE in pervanadate-treated mouse C2C12. The cells were labeled with rabbit polyclonal WAVE1 (N-terminal region) and WAVE (Tyr-125) antibodies, then the antibodies were detected using appropriate secondary antibodies conjugated to Cy3.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.