



## WAVE2 (L-32): sc-100963

### BACKGROUND

WASP (for Wiskott-Aldrich syndrome protein) and N-WASP are downstream effectors of Cdc42 that are implicated in Actin polymerization and cytoskeletal organization. The WASP family also includes VASP (vasodilator-stimulated phosphoprotein) and Mena (for mammalian enabled protein), which accumulate at focal adhesions and are also involved in the regulation of the Actin cytoskeleton. The WAVE proteins are related to the WASP family proteins and are likewise involved in mediating Actin reorganization downstream of the Rho family of small GTPases. The two protein homologs WAVE1 and WAVE2 specifically regulate membrane ruffling by inducing the formation of Actin filament clusters in response to GTP binding and activating Rac. The WAVE proteins mediate this Actin polymerization by cooperating with the Arp2/3 complex, a nucleation core, and thereby promoting the formation of Actin filaments. WAVE1, which is also designated SCAR (for suppressor of cAR), is expressed primarily in the brain, while WAVE2 is widely expressed with the expression highest in peripheral blood leukocytes.

### REFERENCES

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5. Miki, H., Suetsugu, S. and Takenawa, T. 1998. WAVE, a novel WASP-family protein involved in Actin reorganization induced by Rac. *EMBO J.* 17: 6932-6941.
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8. Suetsugu, S., Miki, H. and Takenawa, T. 1999. Identification of two human WAVE/SCAR homologues as general Actin regulatory molecules which associate with the Arp2/3 complex. *Biochem. Biophys. Res. Commun.* 260: 296-302.

### STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### CHROMOSOMAL LOCATION

Genetic locus: WASF2 (human) mapping to Xp11.21.

### SOURCE

WAVE2 (L-32) is a mouse monoclonal antibody raised against recombinant WAVE2 of human origin.

### PRODUCT

Each vial contains 50 µg IgG<sub>2b</sub> in 500 µl of PBS with < 0.1% sodium azide and 0.1% gelatin.

### APPLICATIONS

WAVE2 (L-32) is recommended for detection of WAVE2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for WAVE2 siRNA (h): sc-36833, WAVE2 shRNA Plasmid (h): sc-36833-SH and WAVE2 shRNA (h) Lentiviral Particles: sc-36833-V.

Molecular Weight of WAVE2: 84 kDa.

Positive Controls: AML-193 whole cell lysate, MOLT-4 cell lysate: sc-2233 or CCRF-CEM cell lysate: sc-2225.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

### RESEARCH USE

For research use only, not for use in diagnostic procedures.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.