



WAS Polyclonal Antibody

E90978

Catalog Number: E90978**Amount:** 100ul

Background: Wiskott-Aldrich syndrome proteins (WASPs) mediate actin dynamics by activating the Arp2/3 actin nucleation complex in response to activated Rho family GTPases. In mammals, five WASP family members have been described. Hematopoietic WASP and ubiquitously expressed N-WASP are autoinhibited in unstimulated cells. Upon stimulation they are activated by cdc42, which relieves the autoinhibition in conjunction with phosphatidyl inositol 4,5-bisphosphate. Three WAVE (Wasf, SCAR) family proteins are similar in sequence to WASP and N-WASP but lack the WASP/N-WASP autoinhibition domains and are indirectly activated by Rac (reviewed in 1). Both WASP and WAVE functions appear to be essential, as knockout of either N-WASP or Scar-2 in mice results in cardiac and neuronal defects and embryonic lethality (2,3). Loss of WASP results in immune system defects and fewer immune cells (4). WAVE-2 (WASF2) is widely distributed, while WAVE-1 and WAVE-3 are strongly expressed in brain (5). WAVE-3 may act as a tumor suppressor in neuroblastoma, a childhood disease of the sympathetic nervous system (6). Increased expression of WAVE-3 is seen in breast cancer, and studies in breast adenocarcinoma cells indicate that WAVE-3 regulates breast cancer progression, invasion and metastasis through the p38 mitogen-activated protein kinase (MAPK) pathway (7,8).

Species: Rabbit**Isotype:** IgG

Storage/Stability: Store at -20oC or -80oC. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Synonyms: WAS;IMD2;THC;THC1;WASP ;**Immunogen:** Recombinant protein of human WAS**Purification:** Affinity purification**Reactivity:** H M R**Applications:** WB IHC**Molecular Weight:** 53kDa**Swiss-Prot No.:** P42768**Gene ID:** 7454

References: 1. Millard, T.H. et al. (2004) Biochem J. 380, 1-17. 2. Yan, C. et al. (2003) EMBO J. 22, 3602-3612. 3. Snapper, S.B. et al. (2001) Nat. Cell Biol. 3, 897-904. 4. Zhang, J. et al. (1999) J. Exp. Med. 190, 1329-4132. 5. Suetsugu, S. et al. (1999) Biochem. Biophys. Res. Commun. 260, 296-302. 6. Sossey-Alaoui, K. et al. (2002) Oncogene 21, 5967-5974. 7. Sossey-Alaoui, K. et al. (2005) Exp. Cell Res. 308, 135-145. 8. Sossey-Alaoui, K. et al. (2007) Am J Pathol 170, 2112-21.

WB 1:500 - 1:2000

IHC 1:50- 1:200

