



RAP1APolyclonal Antibody

E90975

Catalog Number: E90975**Amount:** 100ul

Background: Rap1 and Rap2 belong to the Ras subfamily of small GTPases and are activated by a wide variety of stimuli through integrins, receptor tyrosine kinases (RTKs), G-protein coupled receptors (GPCR), death domain associated receptors (DD-R) and ion channels (1,2). Like other small GTPases, Rap activity is stimulated by guanine nucleotide exchange factors (GEF) and inactivated by GTPase activating proteins (GAP). A wide variety of Rap GEFs have been identified: C3G connects Rap1 with RTKs through adaptor proteins such as Crk, Epacs (or cAMP-GEFs) transmit signals from cAMP, and CD-GEFs (or CalDAG-GEFs) convey signals from either or both Ca²⁺ and DAG (1). Rap1 primarily regulates multiple integrin-dependent processes such as morphogenesis, cell-cell adhesion, hematopoiesis, leukocyte migration and tumor invasion (1,2). Rap1 may also regulate proliferation, differentiation and survival through downstream effectors including B-Raf, PI3K, RalGEF and phospholipases (PLCs) (1-4). Rap1 and Rap2 are not functionally redundant as they perform overlapping but distinct functions (5). Recent research indicates that Rap2 regulates Dsh subcellular localization and is required for Wnt signaling in early development (6).

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: RAP1A;KREV-1;KREV1;RAP1;SMGP21 ;**Immunogen:** Recombinant protein of human RAP1A**Purification:** Affinity purification**Reactivity:** H M R**Applications:** WB IHC**Molecular Weight:** 21kDa**Swiss-Prot No. :** P62834**Gene ID:** 5906

References: 1. Bos, J. et al. (2001) Nat. Rev. Mol. Cell Biol. 2, 369-377. 2. Caron, E. (2003) J. Cell Sci. 116, 435-440. 3. Song, C. et al. (2002) Oncogene 21, 8105-8113. 4. Rong, R. et al. (2003) J. Biol. Chem. 278, 52497-52503. 5. Taira, K. et al. (2004) J. Biol. Chem. 279, 49488-49496. 6. Choi, S. and Han, J. (2005) EMBO J. 24, 985-996.

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