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# Rabbit Anti-RAP1A/AF350 Conjugated antibody

SL1504R-AF350

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| **Product Name** | Anti-RAP1A/AF350 |
| **Chinese Name** | AF350 标记的 Rap1A 抗体 |
| **Alias** | C21KG; RAP1; G 22K; G-22K; GTP binding protein smg p21A; GTP-binding protein smg p21A; KREV 1; KREV-1; KREV1; OTTHUMP00000013741; RAP 1A; RAP1; RAP1A; RAP1A member of RAS oncogene family; RAP1A_HUMAN; Ras related protein Krev 1; Ras related protein Rap 1A; RAS related protein RAP1A; Ras-related protein Krev-1; Ras-related protein Rap-1A; SMGP21; rap1a; RAS-related protein-1a precursor; Rap1A-retro2; RAP1A, member of RAS oncogene family. |
| **Research Area** | Cell biology immunology Signal transduction G protein signal |
| **Immunogen Species** | Rabbit |
| **Clonality** | Polyclonal |
| **React Species** | Human,Mouse(predicted:Rat,Chicken,Cow,Horse) |
| **Applications** | IF=1:100-500<br>not yet tested in other applications.<br>optimal dilutions/concentrations should be determined by the end user. |
| **Molecular weight** | 21kDa |
| **Form** | Lyophilized or Liquid |
| **Concentration** | 1mg/ml |
| **immunogen** | KLH conjugated synthetic peptide derived from human RAP1A |
| **Lsotype** | IgG |
| **Purification** | affinity purified by Protein A |
| **Storage Buffer** | 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol |
| **Storage** | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |
| **Product Detail** | **background:** |

This gene encodes a member of the Ras family of small GTPases. The encoded protein undergoes a change in conformational state and activity, depending on whether it is bound to GTP or GDP. This protein is activated by several types of guanine nucleotide exchange factors (GEFs), and inactivated by two groups of GTPase-activating proteins (GAPs). The activation status of the encoded protein is therefore affected by the balance of intracellular levels of GEFs and GAPs. The encoded protein regulates signaling pathways that affect cell proliferation and adhesion, and may play a role in tumor malignancy. Pseudogenes of this gene have been defined on chromosomes 14 and 17. Alternative splicing results in multiple transcript variants. [provided by RefSeq, May 2014].

**Function:**
Induces morphological reversion of a cell line transformed by a Ras oncogene. Counteracts the mitogenic function of Ras, at least partly because it can interact with Ras GAPs and RAF in a competitive manner. Together with ITGB1BP1, regulates KRIT1 localization to microtubules and membranes. Plays a role in nerve growth factor (NGF)-induced neurite outgrowth. Plays a role in the regulation of embryonic blood vessel formation. Involved in the establishment of basal endothelial barrier function. May be involved in the regulation of the vascular endothelial growth factor receptor KDR expression at endothelial cell-cell junctions.

**Subunit:**
Found in a complex, at least composed of ITGB1BP1, KRIT1 and RAP1A. Interacts (active GTP-bound form preferentially) with KRIT1 (via C-terminus FERM domain); the interaction does not induce the opening conformation of KRIT1. In its GTP-bound form interacts with PLCE1 and RADIL. Interacts with SGSM1, SGSM2 and SGSM3. Interacts (via GTP-bound active form) with RAPGEF2 (via Ras-associating domain)

**Subcellular Location:**
Cell membrane; Lipid-anchor. Cytoplasm. Cytoplasm, perinuclear region. Cell junction. Early endosome. Note=Recruited from early endosome to late endosome compartment after nerve growth factor (NGF) stimulation. Localized with RAPGEF2 at cell-cell junctions. Colocalized with RAPGEF2 in the perinuclear region.

**Similarity:**
Belongs to the small GTPase superfamily. Ras family.

**Database links:**

Entrez Gene: 5906 Human

Entrez Gene: 109905 Mouse

Entrez Gene: 295347 Rat

Omim: 179520 Human

SwissProt: P62834 Human

SwissProt: P62835 Mouse

SwissProt: P62836 Rat

Unigene: 190334 Human

Unigene: 458171 Mouse

Unigene: 106321 Rat

**Important Note:**
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

RAP1A 是 RAS 癌基因家族成员，在调节细胞增生和粘附中有重要作用. 经研究发现,Rap1 和它的调节子 SPA-1 在很多恶性 Tumour 的发生、发展中起到一定的作用。定位于胞浆、胞膜。