

Datasheet for ABIN6243297
anti-RAPGEF2 antibody (C-Term)



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1 Image

Overview

Quantity:	400 µL
Target:	RAPGEF2
Binding Specificity:	AA 1464-1498, C-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This RAPGEF2 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Immunogen:	This RAPGEF2 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 1464-1498 amino acids from the C-terminal region of human RAPGEF2.
Clone:	RB52925
Isotype:	Ig Fraction
Purification:	This antibody is purified through a protein A column, followed by peptide affinity purification.

Target Details

Target:	RAPGEF2
Alternative Name:	RAPGEF2 (RAPGEF2 Products)
Background:	Functions as a guanine nucleotide exchange factor (GEF), which activates Rap and Ras family

Target Details

of small GTPases by exchanging bound GDP for free GTP in a cAMP-dependent manner. Serves as a link between cell surface receptors and Rap/Ras GTPases in intracellular signaling cascades. Acts also as an effector for Rap1 by direct association with Rap1-GTP thereby leading to the amplification of Rap1-mediated signaling. Shows weak activity on HRAS. It is controversial whether RAPGEF2 binds cAMP and cGMP (PubMed:< a href="http://www.uniprot.org/citations/23800469" target="_blank">23800469, PubMed:< a href="http://www.uniprot.org/citations/10801446" target="_blank">10801446) or not (PubMed:< a href="http://www.uniprot.org/citations/10608844" target="_blank">10608844, PubMed:< a href="http://www.uniprot.org/citations/10548487" target="_blank">10548487, PubMed:< a href="http://www.uniprot.org/citations/11359771" target="_blank">11359771). Its binding to ligand-activated beta-1 adrenergic receptor ADRB1 leads to the Ras activation through the G(s)-alpha signaling pathway. Involved in the cAMP- induced Ras and Erk1/2 signaling pathway that leads to sustained inhibition of long term melanogenesis by reducing dendrite extension and melanin synthesis. Provides also inhibitory signals for cell proliferation of melanoma cells and promotes their apoptosis in a cAMP-independent manner. Regulates cAMP-induced neuritogenesis by mediating the Rap1/B-Raf/ERK signaling through a pathway that is independent on both PKA and RAPGEF3/RAPGEF4. Involved in neuron migration and in the formation of the major forebrain fiber connections forming the corpus callosum, the anterior commissure and the hippocampal commissure during brain development. Involved in neuronal growth factor (NGF)-induced sustained activation of Rap1 at late endosomes and in brain- derived neurotrophic factor (BDNF)-induced axon outgrowth of hippocampal neurons. Plays a role in the regulation of embryonic blood vessel formation and in the establishment of basal junction integrity and endothelial barrier function. May be involved in the regulation of the vascular endothelial growth factor receptor KDR and cadherin CDH5 expression at allantois endothelial cell-cell junctions.

Molecular Weight:	167417
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UniProt:	Q9Y4G8
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Pathways:	Neurotrophin Signaling Pathway
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Application Details

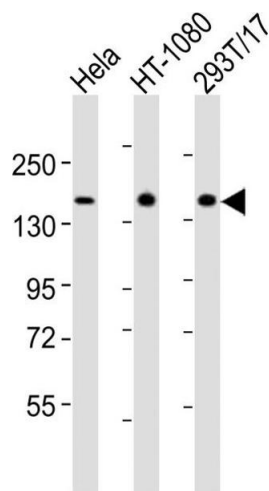
Application Notes:	WB: 1:2000
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Restrictions:	For Research Use only
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Handling

Format:	Liquid
Buffer:	Purified polyclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Expiry Date:	6 months

Images



Western Blotting

Image 1. All lanes : Anti-RGEF2 Antibody (C-term) at 1:2000 dilution Lane 1: HeLa whole cell lysates Lane 2: HT-1080 whole cell lysates Lane 3: 293T/17 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 167 kDa Blocking/Dilution buffer: 5 % NFDM/TBST.