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Datasheet for ABIN1400152

anti-RAPGEF3 antibody (AA 301-400) (Alexa Fluor 488)

Overview

Quantity:	100 µL
Target:	RAPGEF3
Binding Specificity:	AA 301-400
Reactivity:	Human, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This RAPGEF3 antibody is conjugated to Alexa Fluor 488
Application:	Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p))

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human Epac1
Isotype:	IgG
Cross-Reactivity:	Human, Rat
Predicted Reactivity:	Mouse,Rabbit
Purification:	Purified by Protein A.

Target Details

Target:	RAPGEF3
Alternative Name:	Epac1 (RAPGEF3 Products)

Target Details

Background: Synonyms: bcm910, CAMP GEF1, cAMP regulated guanine nucleotide exchange factor I, CAMPGEFI, CGEF 1, CGEF1, EPA1, Epac 1, EPAC, EPAC1, Exchange factor directly activated by cAMP 1, Exchange protein directly activated by cAMP 1, MGC21410, RAP guanine nucleotide exchange factor, Rap guanine nucleotide exchange factor GEF 3, RAP guanine nucleotide exchange factor 3, Rap1 guanine nucleotide exchange factor directly activated by cAMP, RAPGEF3.

Background: The activation of RaP1 by cAMP is independent of PKA and is mediated by recently discovered family of guanine nucleotide exchange factors (GEFs) called cAMP-GEFs or Epacs. The Epac signaling therefore represents a novel mechanism for cAMP signaling with in the cAMP cascade. There are 2 members of the Epac family, Epac1 and Epac 2. Both proteins are multidomain proteins containing an autoinhibitory cAMP-binding domain that inhibits the catalytic region and a DEP domain (dishevelled, Egl-10 and pleckstrin homology domain) targeting the membrane anchors. EPAC2 has an additional cAMP-binding site in its N-terminus that binds cAMP with low affinity. EPAC1 mRNA is broadly expressed, with particularly high levels occurring in the thyroid, ovary, kidney and certain brain regions, whereas expression of EPAC2 mRNA appears to be restricted to the brain and adrenal glands. Epac 1 and Epac 2 also interact with light chain 2 (LC2) or MAP1A that serves as a scaffolding structure to stabilize the signal transduction complex. The Epac 1-selective were generated against unique antigenic sequences form near N-terminus and between RasGEFN and Ras GEF domains. The to Epac 1 are affinity purified over immobilized antigen based chromatography.

Gene ID: 1019

Pathways: [cAMP Metabolic Process](#)

Application Details

Application Notes: IF(IHC-P) 1:50-200
IF(IHC-F) 1:50-200
IF(ICC) 1:50-200

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1 µg/µL

Buffer: Aqueous buffered solution containing 0.01M TBS (pH 7.4) with 1 % BSA, 0.03 % Proclin300 and

Handling

50 % Glycerol.

Preservative: ProClin

Precaution of Use: This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.

Storage: -20 °C

Storage Comment: Store at -20°C. Aliquot into multiple vials to avoid repeated freeze-thaw cycles.

Expiry Date: 12 months