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Datasheet for 600-401-BB1

EPAC1 Antibody

Overview

Description:	Anti-EPAC1 (RABBIT) Antibody - 600-401-BB1
Item No.:	600-401-BB1
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	EPAC1, also known as Rap guanine nuclear exchange factor 3 and cAMPGEF-I, is widely expressed but most prominently in brain, heart, kidney, pancreas, spleen, ovary, thyroid and spinal cord. EPAC1 is a cAMP-binding protein with intrinsic guanine nuclear exchange factor activity that couples cAMP production to the activation of Rap, a GTPase belonging to the Ras family. This activation of Rap influences numerous cellular processes such as integrin-mediated cell adhesion, vascular endothelial barrier formation, and cardiac myocyte gap junction formation. Recently, EPAC1 has been suggested to also be involved in the cAMP-dependent regulation of ion channel formation, intracellular Ca++ signaling, ion transporter activity, and exocytosis.
Synonyms:	EPAC1 Antibody, EPAC, EPAC1, bcm910, HSU79275, CAMP-GEFI, CGEF1, EPAC, Rap guanine nucleotide exchange factor 3, Exchange factor directly activated by cAMP 1, EPAC 1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	RAPGEF3
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-EPAC1 antibody was prepared from whole rabbit serum produced by repeated immunizations with an 18 amino acid synthetic peptide near the N-terminus of human EPAC1.
Purity/Specificity:	Anti-EPAC1 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. At least two isoforms of EPAC1 are known to exist; this antibody will detect both isoforms. EPAC1 antibody is predicted to not cross-react with EPAC2.
Relevant Links:	• UniProtKB - O95398 • GeneID - 10411 • NCBI - NP_659099

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-EPAC1 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 103 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000
IF:	20 µg/mL
IHC:	2.5 µg/mL
WB:	1 µg/mL

Formulation

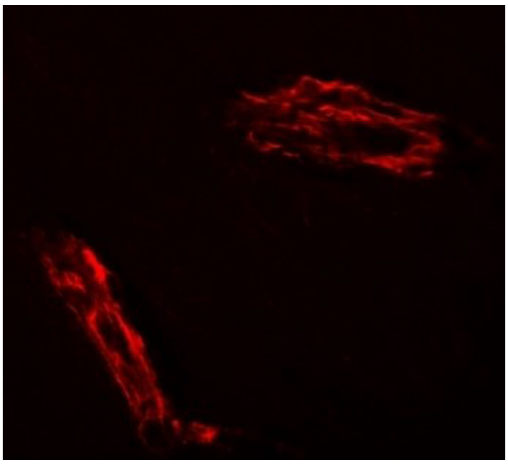
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

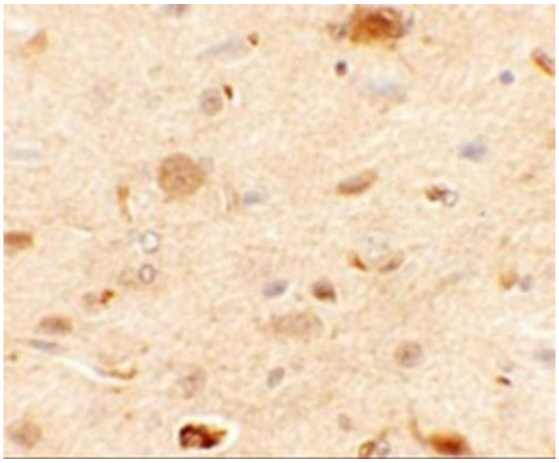
Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

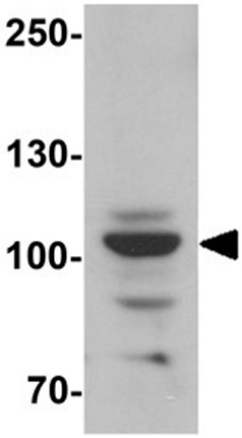
Images



Immunofluorescence Microscopy
Immunofluorescence of EPAC1.
Tissue: rat brain tissue.
Primary Antibody: EPAC1 antibody at 20 µg/mL.



Immunohistochemistry
Immunohistochemistry of EPAC1.
Tissue: rat brain tissue.
Primary Antibody: EPAC1 antibody at 2.5 µg/mL.



Western Blot
Western blot analysis of EPAC1.
Load: rat skeletal muscle tissue lysate.
Primary Antibody: EPAC1 antibody at 1 µg/mL.

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