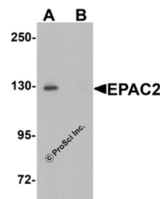


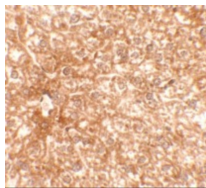


EPAC2 Antibody

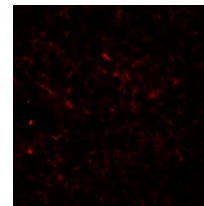
Cat. No.: 6633



Western blot analysis of EPAC2 in rat liver tissue lysate with EPAC2 antibody at 1 μ g/mL in (A) the absence and (B) the presence of blocking peptide.



Immunohistochemistry of EPAC3 in mouse liver tissue with EPAC3 antibody at 2.5 μ g/mL.



Immunofluorescence of EPAC2 in mouse liver tissue with EPAC2 antibody at 20 μ g/mL.

Ψ Specifications

HOST SPECIES:	Rabbit
SPECIES REACTIVITY:	Human, Mouse, Rat
IMMUNOGEN:	EPAC2 antibody was raised against a 15 amino acid synthetic peptide near the amino terminus of human EPAC2. The immunogen is located within the first 50 amino acids of EPAC2.
TESTED APPLICATIONS:	ELISA, IF, IHC-P, WB

APPLICATIONS:	EPAC2 antibody can be used for detection of EPAC1 by Western blot at 1 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20 µg/mL. Antibody validated: Western Blot in rat samples; Immunohistochemistry in mouse samples and Immunofluorescence in mouse samples. All other applications and species not yet tested.
SPECIFICITY:	At least two isoforms of EPAC2 are known to exist; this antibody will detect only the larger isoform. EPAC2 antibody is predicted to not cross-react with EPAC2
POSITIVE CONTROL:	1) Cat. No. 1464 - Rat Liver Tissue Lysate

Ψ Properties

PURIFICATION:	EPAC2 Antibody is affinity chromatography purified via peptide column.
CLONALITY:	Polyclonal
ISOTYPE:	IgG
CONJUGATE:	Unconjugated
PHYSICAL STATE:	Liquid
BUFFER:	EPAC2 Antibody is supplied in PBS containing 0.02% sodium azide.
CONCENTRATION:	1 mg/mL
STORAGE CONDITIONS:	EPAC2 antibody can be stored at 4 °C for three months and -20 °C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Ψ Additional Info

OFFICIAL SYMBOL:	RAPGEF4
ALTERNATE NAMES:	EPAC2 Antibody: 2, EPAC, CGEF2, EPAC2, EPAC 2, Nbla00496, CAMP-GEFII, Rap guanine nucleotide exchange factor 4, Exchange factor directly activated by cAMP 2
ACCESSION NO.:	NP_008954
PROTEIN GI NO.:	155030204
GENE ID:	11069
USER NOTE:	Optimal dilutions for each application to be determined by the researcher.

Ψ Background and References

BACKGROUND:	EPAC2 Antibody: EPAC2, also known as Rap guanine nuclear exchange factor 4 and cAMPGEF-II, is belongs to a family of cyclic adenosine monophosphate (cAMP) binding proteins with guanine nucleotide exchange factor. Like the related protein EPAC1, EPAC2 signaling plays a role in numerous cellular processes such as integrin-mediated cell adhesion, muscle contraction, learning and memory, cell proliferation, and inflammation. Recent evidence suggests that EPAC2 induces synapse remodeling and depression, with mutations in its gene being found in patients with autism.
REFERENCES:	1) Ueno H, Shibasaki T, Iwanaga T, et al. Characterization of the gene EPAC2: structure, chromosomal localization, tissue expression, and identification of the liver-specific isoform. <i>Genomics</i> 2001; 78:91-8
	2) Grandoch M, Roscioni SS, and Schmidt M. The role of Epac proteins, novel cAMP mediators, in the regulation of immune, lung and neuronal function. <i>Brit. J. Pharm.</i> 2010; 159:265-84
	3) Holz GG, Kang G, Harbeck M, et al. Cell physiology of cAMP sensor Epac. <i>J. Physiol.</i> 2006; 577:5-15

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