

Datasheet for 600-401-BB2**EPAC2 Antibody****Overview**

Description:	Anti-EPAC2 (RABBIT) Antibody - 600-401-BB2
Item No.:	600-401-BB2
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	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.
Synonyms:	EPAC2 Antibody, 2, EPAC, CGEF2, EPAC2, EPAC 2, Nbla00496, CAMP-GEFII, Rap guanine nucleotide exchange factor 4, Exchange factor directly activated by cAMP 2
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	RAPGEF4
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-EPAC2 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 15 amino acid synthetic peptide near the N-terminus of human EPAC2.

Purity/Specificity: Anti-EPAC2 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. 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

Relevant Links:

- [UniProtKB - Q8WZA2](#)
- [GeneID - 11069](#)
- [NCBI - NP_008954](#)

Application Details

Tested Applications: ELISA, IF, IHC, WB

Application Note: Anti-EPAC2 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 116 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: 1mg/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

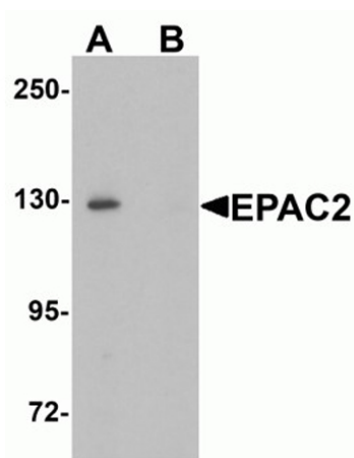
Shipping & Handling

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:

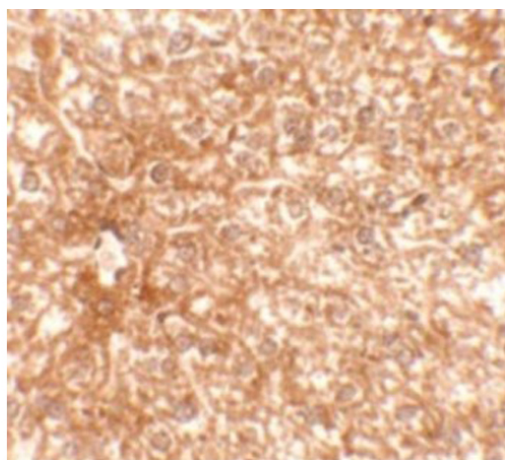
Expiration date is one (1) year from date of receipt.

Images**Western Blot**

Western blot analysis of EPAC2.

Load: rat liver tissue lysate.

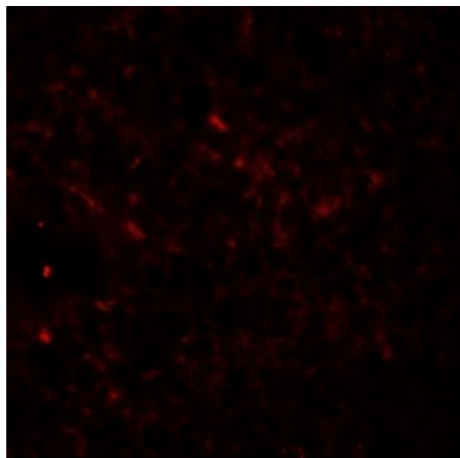
Primary Antibody: EPAC2 antibody at 1 $\mu\text{g/mL}$ in (A) the absence and (B) the presence of blocking peptide.

**Immunohistochemistry**

Immunohistochemistry of EPAC2.

Tissue: mouse liver tissue.

Primary Antibody: EPAC2 antibody at 2.5 $\mu\text{g/mL}$.

**Immunofluorescence Microscopy**

Immunofluorescence of EPAC2.

Primary Antibody: mouse liver tissue.

Primary Antibody: EPAC2 antibody at 20 µg/mL.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.