

**RAPGEF3 / EPAC Antibody (N-Terminus)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS16612****Specification**

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**RAPGEF3 / EPAC Antibody (N-Terminus) - Product Information**

Application	IHC, IF, WB
Primary Accession	<a href="#">O95398</a>
Other Accession	<a href="#">10411</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	103751

**RAPGEF3 / EPAC Antibody (N-Terminus) - Additional Information****Gene ID** 10411**Other Names**

RAPGEF3, Bcm910, CAMP-GEFI, CGEF1, HSU79275, EPAC, EPAC 1, EPAC1

**Target/Specificity**

Human RAPGEF3 / EPAC. 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.

**Reconstitution & Storage**

PBS, 0.02% sodium azide. Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

**Precautions**

RAPGEF3 / EPAC Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

**RAPGEF3 / EPAC Antibody (N-Terminus) - Protein Information****Name** RAPGEF3**Synonyms** CGEF1, EPAC, EPAC1**Function**

Guanine nucleotide exchange factor (GEF) for RAP1A and RAP2A small GTPases that is activated by binding cAMP. Through simultaneous binding of PDE3B to RAPGEF3 and PIK3R6 is assembled in a signaling complex in which it activates the PI3K gamma complex and which is involved in angiogenesis. Plays a role in the modulation of the cAMP- induced dynamic control of endothelial barrier function through a pathway that is independent on Rho-mediated signaling. Required for the actin rearrangement at cell-cell junctions, such as stress fibers and junctional actin.

**Cellular Location**

Endomembrane system

#### **Tissue Location**

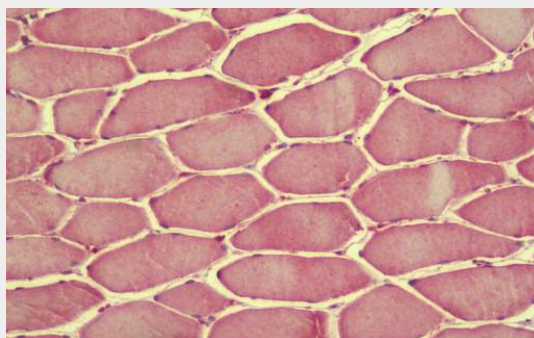
Widely expressed with highest levels in adult kidney, heart, thyroid and brain, and fetal kidney

#### **RAPGEF3 / EPAC Antibody (N-Terminus) - Protocols**

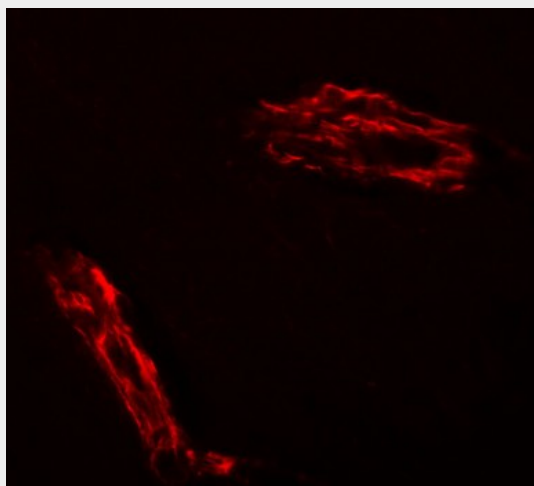
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

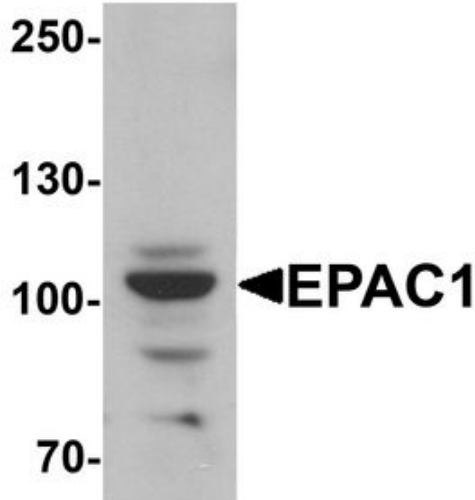
#### **RAPGEF3 / EPAC Antibody (N-Terminus) - Images**



Anti-RAPGEF3 / EPAC antibody IHC staining of human skeletal muscle.



Immunofluorescence of EPAC1 in rat brain tissue with EPAC1 antibody at 20 µg/mL.



Western blot analysis of EPAC1 in rat skeletal muscle tissue lysate with EPAC1 antibody at 1 ug/ml.

#### **RAPGEF3 / EPAC Antibody (N-Terminus) - Background**

Guanine nucleotide exchange factor (GEF) for RAP1A and RAP2A small GTPases that is activated by binding cAMP. Through simultaneous binding of PDE3B to RAPGEF3 and PIK3R6 is assembled in a signaling complex in which it activates the PI3K gamma complex and which is involved in angiogenesis. Plays a role in the modulation of the cAMP-induced dynamic control of endothelial barrier function through a pathway that is independent on Rho- mediated signaling. Required for the actin rearrangement at cell- cell junctions, such as stress fibers and junctional actin.

#### **RAPGEF3 / EPAC Antibody (N-Terminus) - References**

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Ota T.,et al.Nat. Genet. 36:40-45(2004).  
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