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Epac1 Rabbit mAb

Catalog # AP75404

Product Information

Application	WB, IHC-P
Primary Accession	O95398
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	103751

Additional Information

Gene ID	10411
Other Names	RAPGEF3
Dilution	WB~~1:1000-1:5000 IHC-P~~N/A
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

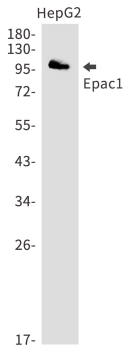
Protein Information

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

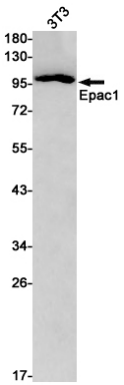
Background

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.

Images



Western blot analysis of Epac1 in HepG2 lysates using Epac1 antibody.



Western blot analysis of Epac1 in 3T3 lysates using Epac1 antibody.

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