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Anti-EPAC1 Antibody

Catalog # AP51831

Product Information

Application	WB, IHC
Primary Accession	O95398
Reactivity	Human, Mouse, Rat, Bovine, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	103751

Additional Information

Gene ID	10411
Other Names	CGEF1; EPAC; EPAC1; Rap guanine nucleotide exchange factor 3; Exchange factor directly activated by cAMP 1; Exchange protein directly activated by cAMP 1; EPAC 1; Rap1 guanine-nucleotide-exchange factor directly activated by cAMP; cAMP-regulated guanine nucleotide exchange factor I; cAMP-GEFI
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human EPAC1. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

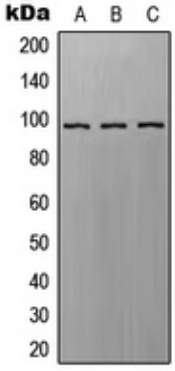
Name	RAPGEF3
Synonyms	CGEF1, EPAC, EPAC1
Function	Guanine nucleotide exchange factor (GEF) for RAP1A and RAP2A small GTPases that is activated by binding cAMP. Through simultaneous binding of PDE3B to RAPGEF3 and PIK3R6 is assembled in a signaling complex in which it activates the PI3K gamma complex 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

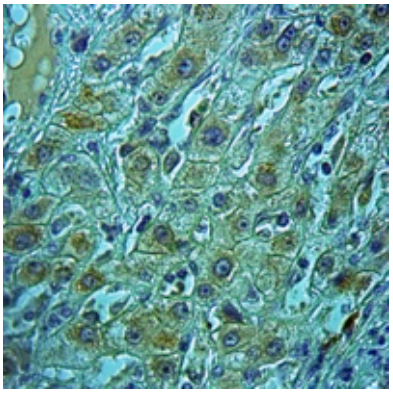
References

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Scherer S.E.,et al.Nature 440:346-351(2006).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
de Rooij J.,et al.Nature 396:474-477(1998).

Images



Western blot analysis of EPAC1 expression in A549 (A), SP2/0 (B), H9C2 (C) whole cell lysates. (Predicted band size: 103 kD; Observed band size: 99 kD)



Immunohistochemical analysis of EPAC1 staining in human liver cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.