

RAPGEF4 / EPAC2 Antibody (N-Terminus) Rabbit Polyclonal Antibody Catalog # ALS15880

Specification

RAPGEF4 / EPAC2 Antibody (N-Terminus) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Dilution WB, IHC-P, IF, E <u>O8WZA2</u> Human, Mouse, Rat Rabbit Polyclonal 116kDa KDa WB~~1:1000 IHC-P~~N/A IF~~1:50~200 E~~N/A

RAPGEF4 / EPAC2 Antibody (N-Terminus) - Additional Information

Gene ID 11069

Other Names

Rap guanine nucleotide exchange factor 4, Exchange factor directly activated by cAMP 2, Exchange protein directly activated by cAMP 2, EPAC 2, cAMP-regulated guanine nucleotide exchange factor II, cAMP-GEFII, RAPGEF4, CGEF2, EPAC2

Target/Specificity

Human RAPGEF4 / EPAC2. At least two isoforms of EPAC2 are known to exist; this antibody will detect only the larger isoform.

Reconstitution & Storage

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

Precautions

RAPGEF4 / EPAC2 Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

RAPGEF4 / EPAC2 Antibody (N-Terminus) - Protein Information

Name RAPGEF4

Synonyms CGEF2, EPAC2

Function

Guanine nucleotide exchange factor (GEF) for RAP1A, RAP1B and RAP2A small GTPases that is activated by binding cAMP. Seems not to activate RAB3A. Involved in cAMP-dependent, PKA-independent exocytosis through interaction with RIMS2 (By similarity).



Cellular Location

Cytoplasm. Membrane; Peripheral membrane protein

Tissue Location

Predominantly expressed in brain and adrenal gland. Isoform 2 is expressed in liver. Isoform 1 is expressed in liver at very low levels

RAPGEF4 / EPAC2 Antibody (N-Terminus) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

RAPGEF4 / EPAC2 Antibody (N-Terminus) - Images



Anti-RAPGEF4 / EPAC2 antibody IHC staining of human testis.



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





Western blot analysis of EPAC2 in rat liver tissue lysate with EPAC2 antibody at 1 ug/ml in (A)... RAPGEF4 / EPAC2 Antibody (N-Terminus) - Background

Guanine nucleotide exchange factor (GEF) for RAP1A, RAP1B and RAP2A small GTPases that is activated by binding cAMP. Seems not to activate RAB3A. Involved in cAMP-dependent, PKA-independent exocytosis through interaction with RIMS2 (By similarity).

RAPGEF4 / EPAC2 Antibody (N-Terminus) - References

Kawasaki H.,et al.Science 282:2275-2279(1998). Ueno H.,et al.Genomics 78:91-98(2001). Ota T.,et al.Nat. Genet. 36:40-45(2004). Hillier L.W.,et al.Nature 434:724-731(2005). de Rooij J.,et al.J. Biol. Chem. 275:20829-20836(2000).