

Basic Information

Product Name	Anti-EPAC1/RAPGEF3 Antibody	
Gene Name	RAPGEF3	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat, monkey	
Tested Application	WB, FCM, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human Epac1/RAPGEF3 recombinant protein (Position: E451-D698).	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	104 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Flow Cytometry (Fixed):	1:50-200
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000

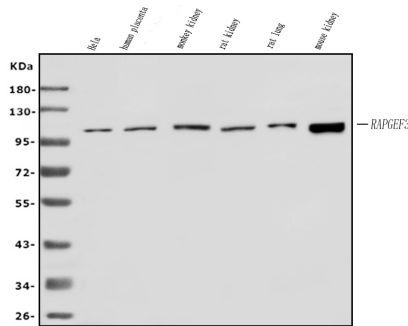
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

Rap guanine nucleotide exchange factor 3 also known as exchange factor directly activated by cAMP 1 (EPAC1) or cAMP-regulated guanine nucleotide exchange factor I (cAMP-GEFI) is a protein that in humans is encoded by the RAPGEF3 gene. As the name suggests, EPAC proteins (EPAC1 and EPAC2) are a family of intracellular sensors for cAMP, and function as nucleotide exchange factors for the Rap subfamily of RAS-like small GTPases.

Selected Validation Data



Western blot analysis of EPAC1/RAPGEF3 using anti-EPAC1/RAPGEF3 antibody (A02483-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HELA whole cell lysates,

Lane 2: human placenta tissue lysates,

Lane 3: monkey kidney tissue lysates,

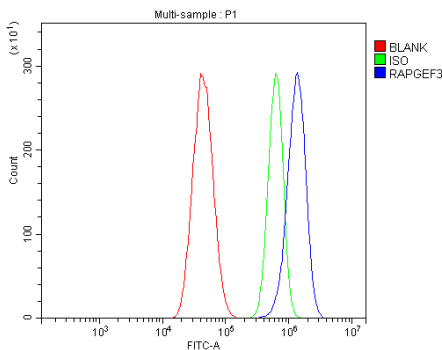
Lane 4: rat kidney tissue lysates,

Lane 5: rat lung tissue lysates,

Lane 6: mouse kidney tissue lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-EPAC1/RAPGEF3 antigen affinity purified polyclonal antibody (A02483-2) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for EPAC1/RAPGEF3 at approximately 104 kDa. The expected band size for EPAC1/RAPGEF3 is at 104 kDa.



Flow Cytometry analysis of U87 cells using anti-EPAC1/RAPGEF3 antibody (A02483-2).

Overlay histogram showing U87 cells stained with A02483-2 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-EPAC1/RAPGEF3 Antibody (A02483-2) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.