

For Research Use Only

EPAC1 Polyclonal antibody

Catalog Number: 12572-1-AP

1 Publications



Basic Information

Catalog Number: 12572-1-AP	GenBank Accession Number: BC017728	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 700 ug/ml by Nanodrop and 540 ug/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 10411	Recommended Dilutions: WB 1:500-1:2000 IHC 1:50-1:500 IF-P 1:50-1:500
Source: Rabbit	UNIPROT ID: O95398	
Isotype: IgG	Full Name: Rap guanine nucleotide exchange factor (GEF) 3	
Immunogen Catalog Number: AG3240	Calculated MW: 881 aa, 99 kDa	
	Observed MW: 99-104 kDa	

Applications

Tested Applications: WB, IHC, IF-P, ELISA	Positive Controls:
Cited Applications: WB	WB : CHO cells, mouse brain tissue, rat brain tissue
Species Specificity: human, mouse, rat, hamster	IHC : human stomach cancer tissue,
Cited Species: human	IF-P : mouse testis tissue,

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Background Information

EPAC1 functions as a guanine nucleotide exchange factor (GEF), activating small GTPases like Rap1 and Rap2, leading to diverse cellular response. Epac proteins are cAMP sensors that regulate several pivotal cellular processes, including calcium handling, cell proliferation, cell survival, cell differentiation, cell polarization, cell adhesion events, gene transcription, secretion, ion transport, and neuronal signaling. It is a potential target for therapeutic intervention, such as metabolic disorders, cardiovascular diseases (PMID: 20007405, PMID: 20421979). EPAC1 also enhances brown fat growth and beige adipogenesis (PMID: 38195707).

Notable Publications

Author	Pubmed ID	Journal	Application
Sarah Ciurus	39985685	Cell Mol Life Sci	WB

Storage

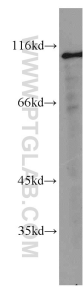
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

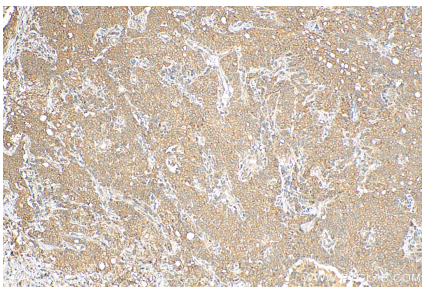
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

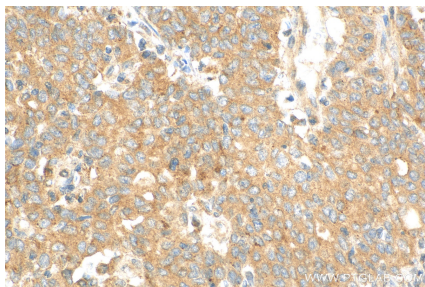
Selected Validation Data



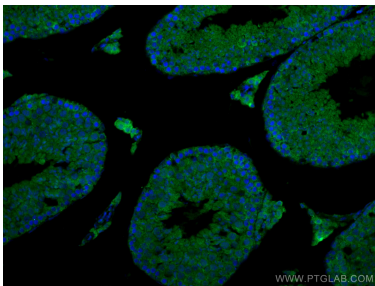
CHO cells were subjected to SDS PAGE followed by western blot with 12572-1-AP (EPAC1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



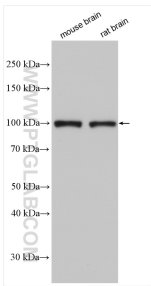
Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 12572-1-AP (EPAC1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 12572-1-AP (EPAC1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse testis tissue using 12572-1-AP (EPAC1 antibody) at dilution of 1:100 and CoraLite488-Conjugated Goat Anti-Rabbit IgG(H+L).



Various lysates were subjected to SDS PAGE followed by western blot with 12572-1-AP (EPAC1 antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.