

For Research Use Only

EPAC1 Polyclonal antibody

Catalog Number: 12572-1-AP



Basic Information

Catalog Number: 12572-1-AP	GenBank Accession Number: BC017728	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 700 µg/ml by Nanodrop and 540 µg/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 1:50-1:500
Source: Rabbit	Full Name: Rap guanine nucleotide exchange factor (GEF) 3	
Isotype: IgG	Calculated MW: 881 aa, 99 kDa	
Immunogen Catalog Number: AG3240	Observed MW: 99-104 kDa	

Applications

Tested Applications:

IF, IHC, WB, ELISA

Species Specificity:

human, mouse, hamster, rat

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

Positive Controls:

WB : CHO cells, mouse brain tissue, rat brain tissue

IHC : human stomach cancer tissue,

IF : mouse testis tissue,

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).

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

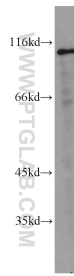
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

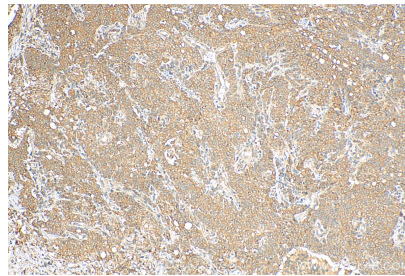
E: proteintech@ptglab.com
W: ptglab.com

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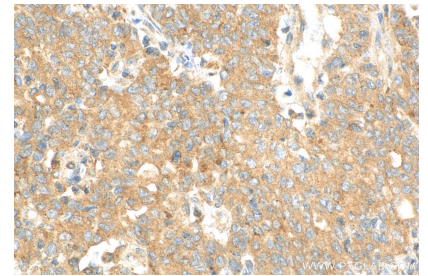
Selected Validation Data



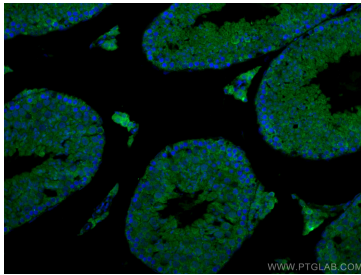
CHO cells were subjected to SDS PAGE followed by western blot with 12572-1-AP (EPAC1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



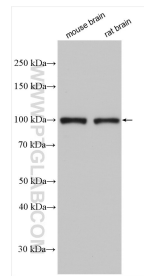
Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 12572-1-AP (EPAC1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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 AffiniPure 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.