For Research Use Only

MTUS1 Polyclonal antibody

Catalog Number: 13436-1-AP

Featured Product

4 Publications



Basic Information

Catalog Number: GenBank Accession Number: 13436-1-AP BC033842
Size: GeneID (NCBI): 57509
Source: UNIPROT ID: Rabbit Q9ULD2
Isotype: Full Name:

mitochondrial tumor suppressor 1

Immunogen Catalog Number:Calculated MW:AG424251 kDa, 141 kDa

Observed MW: 40-48 kDa, 80 kDa, 110-120 kDa, 270-

280 kDa

Applications

Tested Applications: WB, IHC, IF/ICC, IP, ELISA Cited Applications: WB, CoIP, IF

Species Specificity: human, mouse, rat Cited Species: human, mouse

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: Jurkat cells, K-562 cells, human brain tissue, mouse brain tissue

Purification Method:

WB 1:500-1:1000

IHC 1:300-1:1200

IF/ICC 1:20-1:200

protein lysate

Antigen affinity purification

IP 0.5-4.0 ug for 1.0-3.0 mg of total

Recommended Dilutions:

IP: mouse brain tissue,

IHC: human breast cancer tissue, human thyroid

cancer tissue

IF/ICC : PC-3 cells,

Background Information

MTUS1, also named as ATBP, ATIP, GK1, KIAA1288 and MTSG1, Belongs to the MTUS1 family. It cooperates with AGTR2 to inhibit ERK2 activation and cell proliferation. MTUS1 may be required for AGTR2 cell surface expression. Together with PTPN6, induces UBE2V2 expression upon angiotensin-II stimulation. Isoform 1 inhibits breast cancer cell proliferation, delays the progression of mitosis by prolonging metaphase and reduces tumor growth. MTUS1 upregulation during cellular transition from proliferation to quiescence and differentiation. It is a potential tumor suppressor gene located at chromosome 8p21.3.22, near marker D85254. According to the functional data and intracellular localization, MTUS1 also named as mitochondrial tumor suppressor gene 1 (MTSG1). One main feature common to all ATIP members is the presence of a large C-terminal coiled-coil domain that allows homo- and hetero-dimerization of these proteins. (PMID:12692079, 15123706). The antibody can recognize all the isoforms expect isoform 5(85-90 kDa). The antibody tested HomoDimer isoforms (80kd/110-120/280kd) in Jurkat cell.

Notable Publications

Author	Pubmed ID	Journal	Application
Ruili Dang	34529881	Aging Cell	WB
Yinfang Wang	27789289	J Mol Cell Cardiol	WB,IF
Yinfang Wang	29558204	FASEB J	WB,IF,CoIP

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

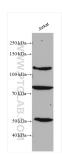
For technical support and original validation data for this product please contact:

T: 4006900926 E: Proteintech-CN@ptglab.com

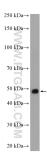
W: ptgcn.com

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

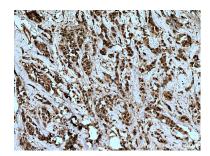
Selected Validation Data



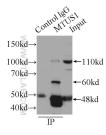
Jurkat lysates were subjected to SDS PAGE followed by western blot with 13436-1-AP (MTUS1 antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



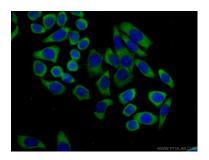
mouse brain tissue were subjected to SDS PAGE followed by western blot with 13436-1-AP (MTUS1 antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 13436-1-AP (MTUS1 antibody) at dilution of 1:600 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-MTUS1 (IP:13436-1-AP, 4ug; Detection:13436-1-AP 1:500) with mouse brain tissue lysate 6000ug.



Immunofluorescent analysis of (-20°C Ethanol) fixed PC-3 cells using 13436-1-AP (MTUS1 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).