

For Research Use Only

# MTUS1 Polyclonal antibody

Catalog Number: 13436-1-AP

Featured Product

4 Publications



## Basic Information

### Catalog Number:

13436-1-AP

### Size:

150ul, Concentration: 850 ug/ml by Nanodrop and 330 ug/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG4242

### GenBank Accession Number:

BC033842

### GeneID (NCBI):

57509

### UNIPROT ID:

Q9ULD2

### Full Name:

mitochondrial tumor suppressor 1

### Calculated MW:

51 kDa, 141 kDa

### Observed MW:

40-48 kDa, 80 kDa, 110-120 kDa, 270-280 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:1000

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

IHC 1:300-1:1200

IF/ICC 1:20-1:200

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, ColP, IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse

### Positive Controls:

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

IP: mouse brain tissue,

IHC: human breast cancer tissue, human thyroid cancer tissue

IF/ICC: PC-3 cells,

**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

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 up-regulation during cellular transition from proliferation to quiescence and differentiation. It is a potential tumor suppressor gene located at chromosome 8p21.3.22, near marker D8S254. 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,ColP

## 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

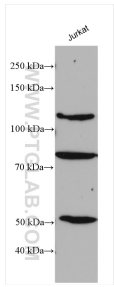
For technical support and original validation data for this product please contact:

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

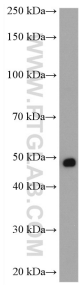
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

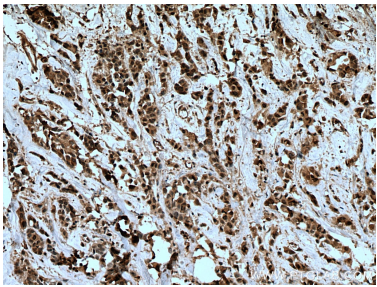
Selected Validation Data



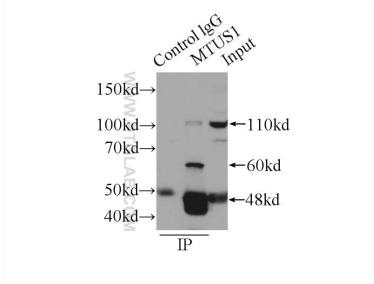
Jurkat lysates were subjected to SDS PAGE followed by western blot with 13436-1-AP (MTUS1 antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



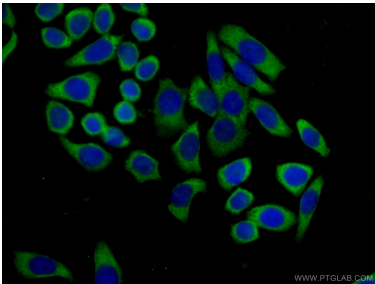
mouse brain tissue were subjected to SDS PAGE followed by western blot with 13436-1-AP (MTUS1 antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded 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 Goat Anti-Rabbit IgG(H+L).