For Research Use Only

PITRM1 Polyclonal antibody

Catalog Number:10101-2-AP 2 Publications



Basic Information

Catalog Number: GenBank Accession Number: 10101-2-AP BC001150 GeneID (NCBI): Size: 500 ug/ml 10531 Source: **UNIPROT ID:**

Q5JRX3 Rabbit Isotype: Full Name:

pitrilysin metallopeptidase 1

Immunogen Catalog Number: Calculated MW: AG0150 60 kDa, 117 kDa

> Observed MW: 110-117 kDa

Purification Method:

Antigen affinity purification Recommended Dilutions:

WB 1:200-1:1000 IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC 1:100-1:400 IF/ICC 1:200-1:800

Applications

Tested Applications:

Cited Applications:

Species Specificity: human, mouse, rat

Cited Species: human, mouse

WB, IHC, IF/ICC, IP, ELISA

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval antigen retrieval with a trace buffer and 16.0

with citrate buffer pH 6.0

Positive Controls:

WB: human placenta tissue, A549 cells, mouse testis

tissue

IP: A549 cells.

IHC: human breast cancer tissue, human osteosarcoma

tissue

IF/ICC: A549 cells,

Background Information

PITRM1 (Presequence protease, mitochondrial) is a ATP-independent protease that degrades mitochondrial transit peptides after their cleavage. It is specific for peptides in the range of 10 to 65 residues and able to degrade amyloid beta A4 (APP) protein when it accumulates in mitochondrion, suggesting a link with Alzheimer disease. It shows a preference for cleavage after small polar residues and before basic residues, but without any positional preference(PMID:16849325). This protein has a calculated molecular mass of 117kD and it is expressed widely. This antibody is specific to PITRM1.

Notable Publications

Author	Pubmed ID	Journal	Application
Evelyn Fessler	35388015	Nat Commun	WB
Mitchell Andrew J AJ	23894327	PLoS One	WB

Storage

Storage:

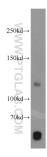
Store at -20°C. Stable for one year after shipment.

Storage Buffer

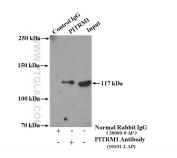
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

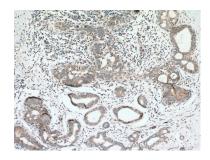
Selected Validation Data



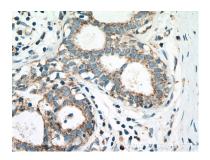
human placenta tissue were subjected to SDS PAGE followed by western blot with 10101-2-AP (PITRM1 antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.



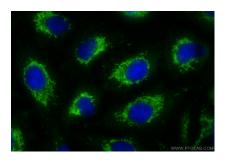
IP result of anti-PITRM1 (IP:10101-2-AP, 4ug; Detection:10101-2-AP 1:500) with A549 cells lysate 2000ug.



Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 10101-2-AP (PITRM1 Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 10101-2-AP (PITRM1 Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) fixed A549 cells using PITRM1 antibody (10101-2-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).