

For Research Use Only

# TPM4 Monoclonal antibody

Catalog Number: 67244-1-Ig

Featured Product

3 Publications



## Basic Information

Catalog Number:

67244-1-Ig

Concentration:

1000 ug/ml

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

AG6947

GenBank Accession Number:

BC037576

GeneID (NCBI):

7171

ENSEMBL Gene ID:

ENSG00000167460

UNIPROT ID:

P67936

Full Name:

tropomyosin 4

Calculated MW:

248 aa, 29 kDa

Observed MW:

32-35 kDa

Purification Method:

Protein G purification

CloneNo.:

2E12D12

Recommended Dilutions:

WB 1:5000-1:50000

IHC 1:1000-1:4000

IF/ICC 1:200-1:800

## Applications

Tested Applications:

WB, IHC, IF/ICC, ELISA

Cited Applications:

WB, IF

Species Specificity:

human, mouse, rat, pig, rabbit

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**: rat skeletal muscle tissue, A549 cells, HeLa cells, HepG2 cells, mouse skeletal muscle tissue, rabbit skeletal muscle tissue, rat heart tissue, mouse heart tissue, rabbit heart tissue, HT-29 cells, human heart tissue, pig heart tissue

**IHC**: mouse heart tissue, rat heart tissue

**IF/ICC**: MCF-7 cells,

## Background Information

TPM4 is a member of tropomyosins (TPMs), a multi-gene family of actin-binding proteins present in all eukaryotic cells. In muscle, TPMs are responsible for mediating contraction via regulation of the actin-myosin interaction. As to non-muscle cells, its proposed role is to stabilize the actin filaments by modulating the interaction with proteins that are responsible for the regulation of actin dynamics. The form of TPM4 in muscle has a higher molecular weight than the form found in non-muscle cells.

## Notable Publications

Author	Pubmed ID	Journal	Application
Wenzhong Yang	39622827	Cell Discov	IF
Diego Iacono	38427613	PLoS One	WB
Rie Karasawa	37144941	Rheumatology (Oxford)	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

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

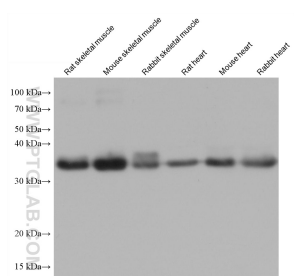
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

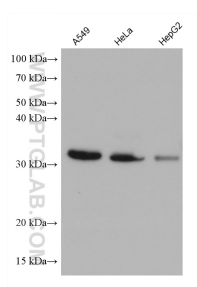
W: [ptgcn.com](http://ptgcn.com)

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

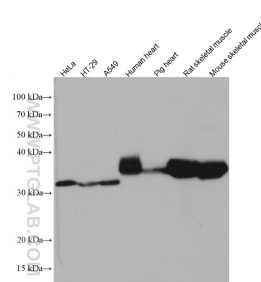
## Selected Validation Data



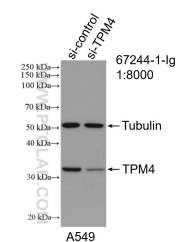
Various lysates were subjected to SDS PAGE followed by western blot with 67244-1-Ig (TPM4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



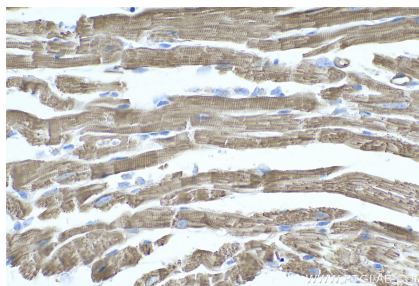
Various lysates were subjected to SDS PAGE followed by western blot with 67244-1-Ig (TPM4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



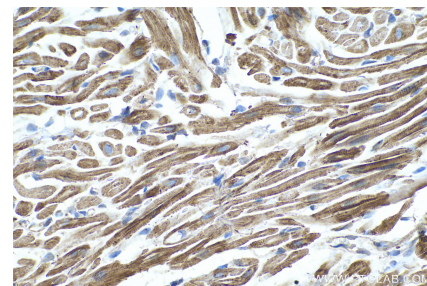
Various lysates were subjected to SDS PAGE followed by western blot with 67244-1-Ig (TPM4 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



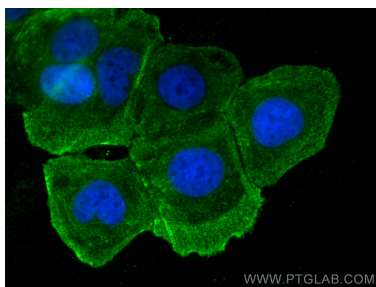
WB result of TPM4 antibody (67244-1-Ig; 1:8000; incubated at room temperature for 1.5 hours) with sh-Control and sh-TPM4 transfected A549 cells.



Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 67244-1-Ig (TPM4 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded rat heart tissue slide using 67244-1-Ig (TPM4 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using TPM4 antibody (67244-1-Ig, Clone: 2E12D12) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).