

For Research Use Only

# TPM4 Polyclonal antibody

Catalog Number: 13741-1-AP

Featured Product

5 Publications



## Basic Information

Catalog Number:

13741-1-AP

Size:

150ul, Concentration: 1000 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG4679

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:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:2000

IHC 1:20-1:200

## Applications

Tested Applications:

WB, IHC, ELISA

Cited Applications:

WB, IHC

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 : mouse skeletal muscle tissue, HeLa cells, rat skeletal muscle tissue

IHC : human endometrial cancer tissue,

## Background Information

TPM4, also named as TM30p1, Tropomyosin 4, Tropomyosin alpha 4 chain. This gene is one gene type of tropomyosin isoforms and encodes a member of the tropomyosin family of actin-binding proteins involved in the contractile system of striated and smooth muscles and the cytoskeleton of non-muscle cells. Tropomyosin is a major regulatory protein of cytoskeleton and is localized along actin filaments modulating the interaction of actin and myosin (PubMed: 26315888, PubMed: 32638329). In addition, TPM4 has been reported as an oncoprotein in several malignancies (PubMed: 37459535). The calculated molecular weight of TPM4 is usually approximately 28 kDa. It may have two isoforms: the short 30-kDa isoform (TPM4.2) and the long 38-kDa isoform (TPM4.1) (PubMed: 28134622).

## Notable Publications

Author	Pubmed ID	Journal	Application
Jingjing Dai	32801739	Onco Targets Ther	WB
Linjing Li	33390785	Int J Med Sci	WB, IHC
Q Zhou	30739146	Osteoporos Int	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

\*\*\* 20ul sizes contain 0.1% BSA

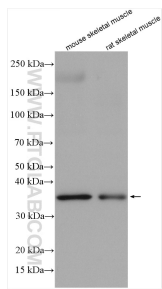
For technical support and original validation data for this product please contact:

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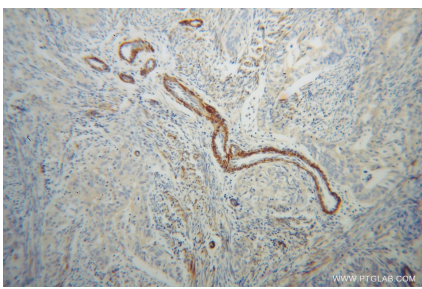
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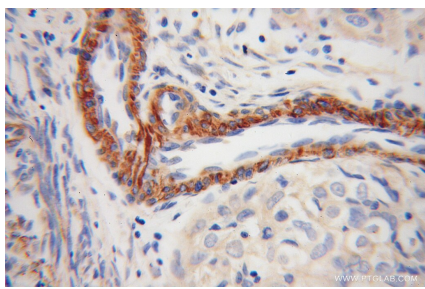
Selected Validation Data



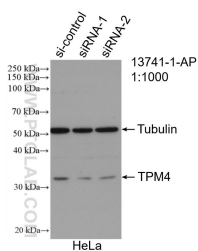
Various lysates were subjected to SDS PAGE followed by western blot with 13741-1-AP (TPM4 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human endometrial cancer using 13741-1-AP (TPM4 antibody) at dilution of 1:100 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human endometrial cancer using 13741-1-AP (TPM4 antibody) at dilution of 1:100 (under 40x lens).



WB result of TPM4 antibody (13741-1-AP; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-TPM4 transfected HeLa cells.