

For Research Use Only

# TPM4 Polyclonal antibody

Catalog Number: 13741-1-AP

Featured Product

5 Publications



## Basic Information

<b>Catalog Number:</b> 13741-1-AP	<b>GenBank Accession Number:</b> BC037576	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 1000 µg/ml	<b>GeneID (NCBI):</b> 7171	<b>Recommended Dilutions:</b> WB 1:500-1:2000 IHC 1:20-1:200
<b>Source:</b> Rabbit	<b>ENSEMBL Gene ID:</b> ENSG00000167460	
<b>Isotype:</b> IgG	<b>UNIPROT ID:</b> P67936	
<b>Immunogen Catalog Number:</b> AG4679	<b>Full Name:</b> tropomyosin 4	
	<b>Calculated MW:</b> 248 aa, 29 kDa	
	<b>Observed MW:</b> 32-35 kDa	

## Applications

<b>Tested Applications:</b> IHC, WB, ELISA	<b>Positive Controls:</b> WB : mouse skeletal muscle tissue, HeLa cells, rat skeletal muscle tissue IHC : human endometrial cancer tissue,
<b>Cited Applications:</b> IHC, WB	
<b>Species Specificity:</b> human, mouse, rat	
<b>Cited Species:</b> 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**

## 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

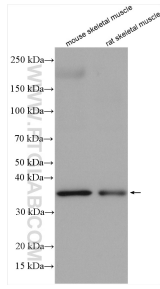
## Storage

**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

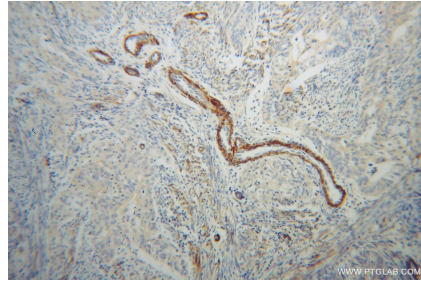
For technical support and original validation data for this product please contact:  
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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

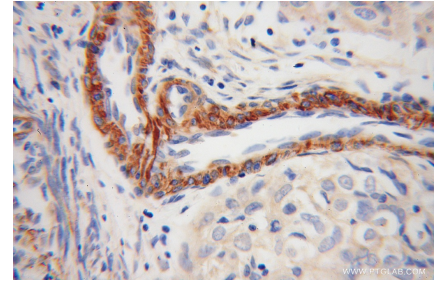
## Selected Validation Data



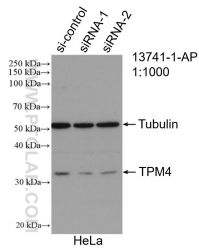
Various lysates were subjected to SDS PAGE followed by western blot with 13741-1-AP (TPM4 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



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.