### For Research Use Only

# TPM4 Monoclonal antibody

Catalog Number:67244-1-lg Featured Product

1 Publications



**Basic Information** 

**Applications** 

Catalog Number: GenBank Accession Number:

Protein A purification 67244-1-lg BC037576 GeneID (NCBI): CloneNo.: Size:

150ul, Concentration: 1900 µg/ml by 7171 2E12D12 Nanodrop and 1000 µg/ml by Bradford<sub>Full Name</sub>: Recommended Dilutions: method using BSA as the standard; WB 1:5000-1:50000 tropomyosin 4

Calculated MW: Mouse 248 aa, 29 kDa Isotype: Observed MW: lgG1 32-35 kDa

Immunogen Catalog Number:

AG6947

Positive Controls:

**Tested Applications:** IHC, WB, ELISA **Cited Applications:** 

Human, mouse, rat, pig, rabbit

**Cited Species:** human

**Species Specificity:** 

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

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

**Purification Method:** 

IHC 1:1000-1:4000

IHC: mouse heart tissue, rat heart tissue

# **Background Information**

TPM4 is a member of tropomyosins (TPMs), a multi-gene family of actin-binding proteins present in all eukaryotic  $cells. In \, muscle, TPMs \, are \, responsible \, for \, mediating \, contraction \, via \, regulation \, of \, the \, actin-myosin \, interaction. \, As \, to \, contraction \, via \, regulation \, of \, the \, actin-myosin \, interaction. \, As \, to \, contraction \, via \, regulation \, of \, the \, actin-myosin \, interaction. \, As \, to \, contraction \, via \, regulation \, of \, the \, actin-myosin \, interaction. \, As \, to \, contraction \, via \, regulation \, of \, the \, actin-myosin \, interaction \, via \, regulation \, of \, the \, actin-myosin \, interaction \, via \, regulation \, of \, the \, actin-myosin \, interaction \, via \, regulation \, of \, the \, actin-myosin \, interaction \, via \, regulation \, of \, the \, actin-myosin \, interaction \, via \, regulation \, of \, the \, actin-myosin \, interaction \, via \, regulation \, of \, the \, actin-myosin \, interaction \, via \, regulation \,$ 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
Rie Karasawa	37144941	Rheumatology (Oxford)	WB

Storage

Storage:

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

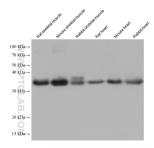
Storage Buffer:

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

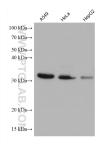
Aliquoting is unnecessary for -20°C storage

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

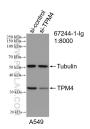
## **Selected Validation Data**



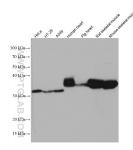
Various lysates were subjected to SDS PAGE followed by western blot with 67244-1-1g (TPM4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



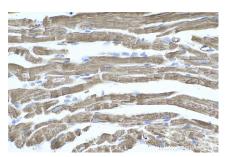
Various lysates were subjected to SDS PAGE followed by western blot with 67244-1-1g (TPM4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



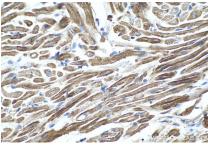
WB result of TPM4 antibody (67244-1-lg; 1:8000; incubated at room temperature for 1.5 hours) with sh-Control and sh-TPM4 transfected A549 cells.



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



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