## For Research Use Only

## TPM2 Polyclonal antibody

Catalog Number: 11038-1-AP

**Featured Product** 

**4 Publications** 

BC011776

7169

P07951

GeneID (NCBI):

**UNIPROT ID:** 

Full Name:

tropomyosin 2 (beta)

GenBank Accession Number:



**Basic Information** 

Catalog Number: 11038-1-AP Size:

300 μg/ml Source: Rabbit Isotype:

Immunogen Catalog Number:

AG1508

Calculated MW: 33 kDa Observed MW: 29-33 kDa

**Purification Method:** 

Antigen affinity purification

Recommended Dilutions: WB 1:1000-1:4000

IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC 1:50-1:500 IF/ICC 1:50-1:500

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, IP, ELISA

Cited Applications:

WB, IHC, IP

Species Specificity: human, mouse, rat **Cited Species:** human, mouse, rat

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: HT-1080 cells, HeLa cells, mouse skeletal muscle,

rat skeletal muscle

IP: mouse skeletal muscle tissue,

IHC: human breast cancer tissue, human heart tissue, human skeletal muscle tissue, mouse heart tissue

IF/ICC: HepG2 cells,

**Background Information** 

TPM2, also named as TMSB, belongs to the tropomyosin family. It binds to actin filaments in muscle and non-muscle cells. TPM2 plays a central role, in association with the troponin complex, in the calcium dependent regulation of vertebrate striated muscle contraction. In non-piamuscle cells, TPM2 is implicated in stabilizing cytoskeleton actin filaments. Defects in TPM2 are the cause of nemaline myopathy type 4 (NEM4) and distal arthrogryposis type 1 (DA1).

## **Notable Publications**

Author	Pubmed ID	Journal	Application
Beatrice Vahle	38928324	Int J Mol Sci	WB
Diego Iacono	38427613	PLoS One	WB
Ming Luo	37246175	Bone Res	WB

Storage

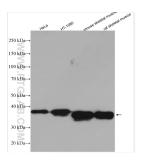
Storage:

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

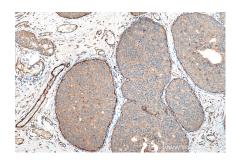
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

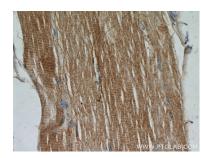
## **Selected Validation Data**



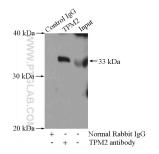
Various lysates were subjected to SDS PAGE followed by western blot with 11038-1-AP (TPM2 antibody) at dilution of 1:2000 incubated at room temporarium for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 11038-1-AP (TPM2 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 skeletal muscle using 11038-1-AP (TPM2 antibody) at dilution of 1:50 (under 40x lens)



IP result of anti-TPM2 (IP:11038-1-AP, 4ug; Detection:11038-1-AP 1:500) with mouse skeletal muscle tissue lysate 3600ug.



WB result of TPM2 antibody (11038-1-AP; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-TPM2 transfected HeLa cells.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using TPM2 antibody (11038-1-AP) at dilution of 1:200 and Coralite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidinv (red).