SunLong Biotech Co.,LTD
Tel: 0086-571- 56623320 Fax:0086-571- 56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-TPM2 antibody

SL1243R

Product Name:	TPM2
Chinese Name:	原肌球蛋白抗体
Alias:	AMCD1; Beta tropomyosin muscle; BETA-TM; DA1; DA2B; EPITHELIAL TROPOMYOSIN; FIBROBLAST MUSCLE TYPE TROPOMYOSIN; MGC109519; NEM4; TM2; TMSB; TPM2; TROP-2; TROPOMYOSIN 2; Tropomyosin 2 (beta chain); TPM2_MOUSE; TPM2_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Cow,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	33kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human TPM2:11-130/284
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Tropomyosin is a dimeric coiled coil protein that binds along the length of actin filaments. It is associated with the thin filaments of muscle cells and the microfilaments of nonmuscle cells. Chicken embryo fibroblasts (CEF) contain five isoforms of tropomyosin (a, b, 1, 2, and 3), identified as such by their different apparent molecular

masses after separation by SDS-PAGE, but similar biochemical properties, such as resistance to heat and organic solvents, the ability to bind to F actin filaments, and the lack of proline and tryptophan.

Function:
Binds to actin filaments in muscle and non-muscle cells. Plays a central role, in association with the troponin complex, in the calcium dependent regulation of vertebrate striated muscle contraction. Smooth muscle contraction is regulated by interaction with caldesmon. In non-muscle cells is implicated in stabilizing cytoskeleton actin filaments. The non-muscle isoform may have a role in agonist-mediated receptor internalization.

Subunit:
Heterodimer of an alpha and a beta chain.

Subcellular Location:
Cytoplasm, cytoskeleton.

Tissue Specificity:
Present in primary breast cancer tissue, absent from normal breast tissue.

Post-translational modifications:
Phosphorylated on Ser-61 by PIK3CG. Phosphorylation on Ser-61 is required for ADRB2 internalization.

DISEASE:
Nemaline myopathy 4 (NEM4) [MIM:609285]: A form of nemaline myopathy. Nemaline myopathies are muscular disorders characterized by muscle weakness of varying severity and onset, and abnormal thread-like or rod-shaped structures in muscle fibers on histologic examination. Nemaline myopathy type 4 presents from infancy to childhood with hypotonia and moderate-to-severe proximal weakness with minimal or no progression. Major motor milestones are delayed but independent ambulation is usually achieved, although a wheelchair may be needed in later life. Note=The disease is caused by mutations affecting the gene represented in this entry.
Arthrogryposis, distal, 1A (DA1A) [MIM:108120]: A form of distal arthrogryposis, a disease characterized by congenital joint contractures that mainly involve two or more distal parts of the limbs, in the absence of a primary neurological or muscle disease. Distal arthrogryposis type 1 is characterized largely by camptodactyly and clubfoot. Hypoplasia and/or absence of some interphalangeal creases is common. The shoulders and hips are less frequently affected. Note=The disease is caused by mutations affecting the gene represented in this entry.

Similarity:
Belongs to the tropomyosin family.

SWISS:
P07951

Gene ID:
7169

Database links:

Entrez Gene: 7169Human

Entrez Gene: 22004Mouse

Entrez Gene: 500450Rat

Omim: 190990Human

SwissProt: P07951Human

SwissProt: P58774Mouse

SwissProt: P58775Rat

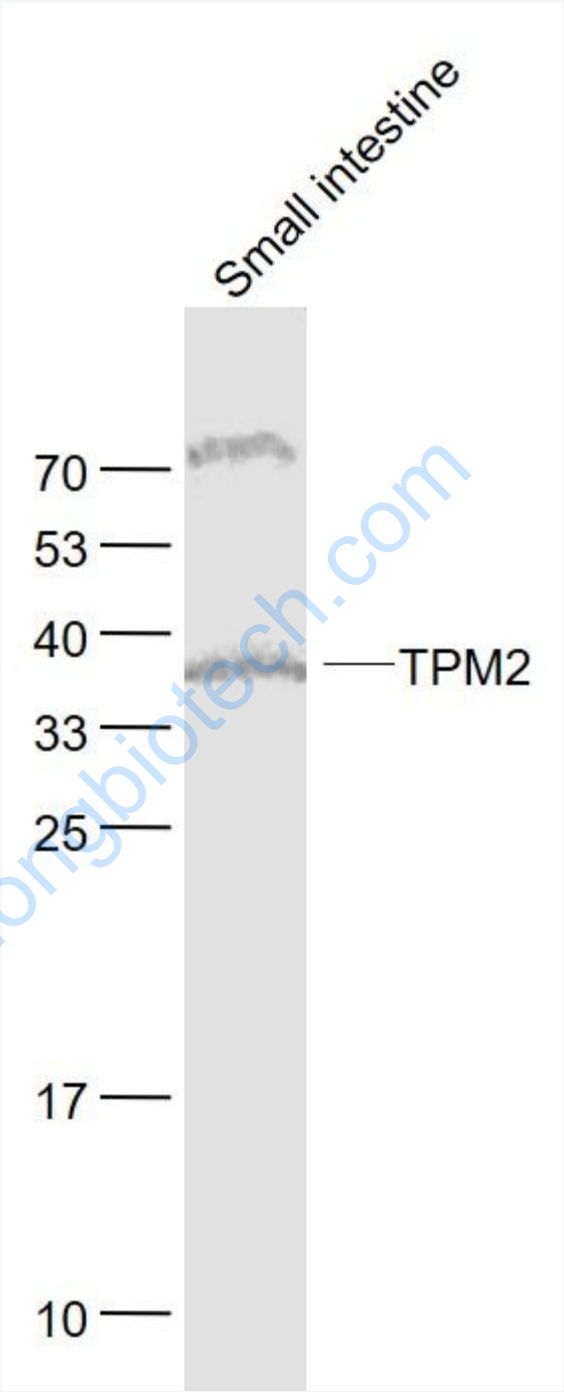
Unigene: 300772Human

Unigene: 646Mouse

Unigene: 17580Rat

Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

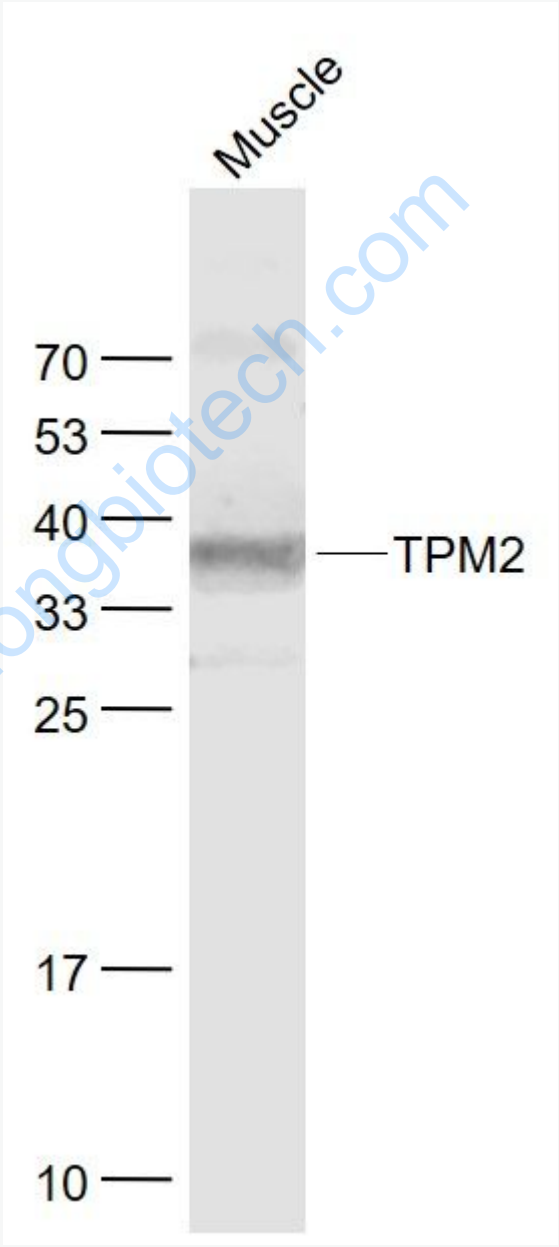
Trop-2蛋白主要存在于细胞胞质及表面,
它是丝裂原活化蛋白激酶(MAPK)通路的一个重要组成部，参与细胞生长、增殖、分化、死亡及细胞间的功能同步等多种生理过程.
Trop-
2在很多常见的Tumour上扮演着重要角色，其中包括乳腺癌、胃癌、结肠癌、肺癌、前列腺癌、胰腺癌和子宫癌，有学者认为:Trop-
2在孕期内所具有的生殖功能可能意味著它同Tumour的生长有关联。

Picture:	 Sample: Small intestine (Mouse) Lysate at 40 ug Primary: Anti- TPM2 (SL1243R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 33 kD

Observed band size: 35 kD



Sample:

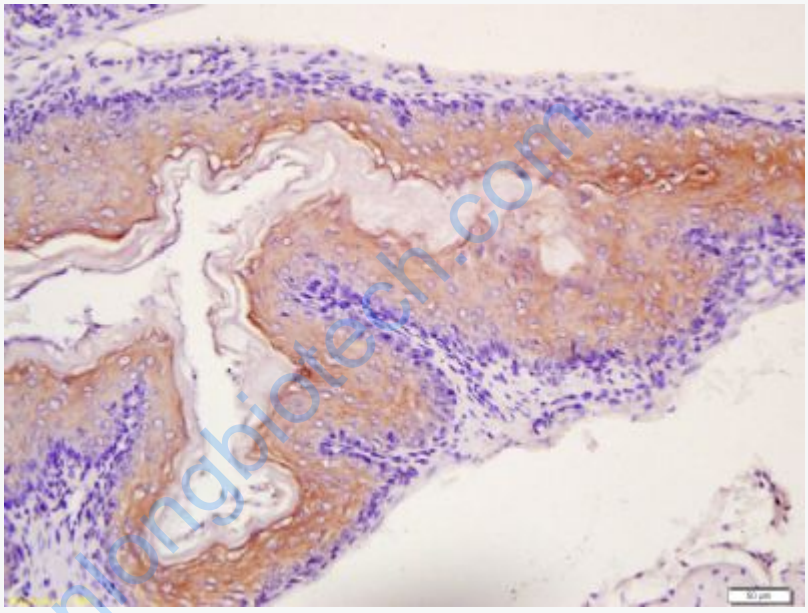
Small intestine (Mouse) Lysate at 40 ug

Primary: Anti- TPM2 (SL1243R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 33 kD

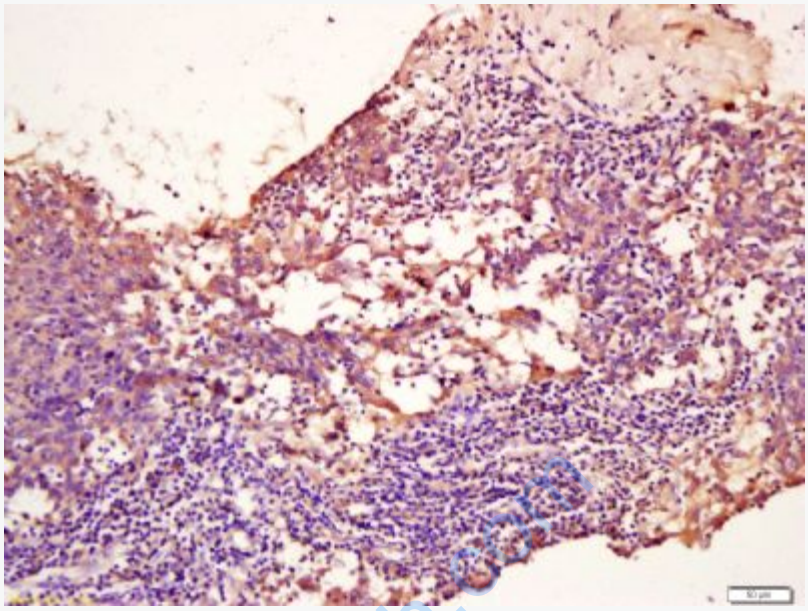
Observed band size: 35 kD



Tissue/cell: mouse stomach wall; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;

Incubation: Anti-TPM2 Polyclonal Antibody, Unconjugated(SL1243R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: human breast carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;

Incubation: Anti-TPM2 Polyclonal Antibody, Unconjugated(SL1243R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining