

## Product datasheet for AR09621PU-L

## OriGene Technologies, Inc.

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## Tropomyosin-1 (TPM1) (1-284, His-tag) Human Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Tropomyosin-1 (TPM1) (1-284, His-tag) human recombinant protein, 0.5 mg

Species: Human
Expression Host: E. coli

Expression cDNA Clone MGSSHHHHHH SSGLVPRGSH MDAIKKKMQM LKLDKENALD RAEQAEADKK AAEDRSKQLE

or AA Sequence: DELVSLQKKL KGTEDELDKY SEALKDAQEK LELAEKKATD AEADVASLNR RIQLVEEELD

RAQERLATAL QKLEEAEKAA DESERGMKVI ESRAQKDEEK MEIQEIQLKE AKHIAEDADR

KYEEVARKLV IIESDLERAE ERAELSEGQV RQLEEQLRIM DQTLKALMAA EDKYSQKEDR YEEEIKVLSD

KLKEAETRAE FAERSVTKLE KSIDDLEDEL YAQKLKYKAI SEELDHALND MTSM

Tag: His-tag

**Concentration:** lot specific

Purity: >90% by SDS - PAGE

**Buffer:** Presentation State: Purified

State: Liquid purified protein

Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 20% glycerol, 0.1M NaCl, 1 mM DTT

**Preparation:** Liquid purified protein

**Protein Description:** Recombinant human TPM1 protein, fused to His-tag at N-terminus, was expressed in E.coli

and purified by using conventional chromatography techniques.

Storage: Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

**RefSeq:** NP 000357

 Locus ID:
 7168

 UniProt ID:
 P09493

 Cytogenetics:
 15q22.2

**Synonyms:** Tropomyosin alpha-1 chain, Alpha-tropomyosin, TMSA, C15orf13





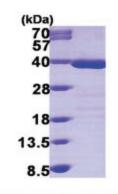
**Summary:** 

This gene is a member of the tropomyosin family of highly conserved, widely distributed actin-binding proteins involved in the contractile system of striated and smooth muscles and the cytoskeleton of non-muscle cells. Tropomyosin is composed of two alpha-helical chains arranged as a coiled-coil. It is polymerized end to end along the two grooves of actin filaments and provides stability to the filaments. The encoded protein is one type of alpha helical chain that forms the predominant tropomyosin of striated muscle, where it also functions in association with the troponin complex to regulate the calcium-dependent interaction of actin and myosin during muscle contraction. In smooth muscle and non-muscle cells, alternatively spliced transcript variants encoding a range of isoforms have been described. Mutations in this gene are associated with type 3 familial hypertrophic cardiomyopathy. [provided by RefSeq, Jul 2008]

**Protein Families:** Druggable Genome

**Protein Pathways:** Cardiac muscle contraction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM)

## **Product images:**



15% SDS-PAGE (3ug)