

Product datasheet for **AR09621PU-L**

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 or AA Sequence: | <u>MGSSHHHHHH SSGLVPRGSH</u> MDAIKKKMQM LKLDKENALD RAEQAEADKK AAEDRSKQLE DELVSLQKKL KGTEDELDKY SEALKDAQEK LELAEEKATD AEADVASLNR RIQLVEEELD RAQERLATAL QKLEEAKEAA DESERGMKVI ESRAQKDEEK MEIQEIQLKE AKHIAEDADR KYEEVARKLV IIESDLERA EERAELSEGQV 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: | <u>NP_000357</u> |
| Locus ID: | 7168 |
| UniProt ID: | <u>P09493</u> |
| Cytogenetics: | 15q22.2 |
| Synonyms: | Tropomyosin alpha-1 chain, Alpha-tropomyosin, TMSA, C15orf13 |


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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:
