

AR09621PU-N

Human Tropomyosin-1 (TPM1) (1-284, His-tag) - Purified

Alternate names:

Alpha-tropomyosin, C15orf13, TMSA, Tropomyosin alpha-1 chain

Quantity:

0.1 mg

Concentration:

0.5 mg/ml (determined by Bradford assay)

Background:

TPM1 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. TPM1 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.

Uniprot ID:

[P09493](#)

NCBI:

[NP_000357](#)

GenelD:

[7168](#)

Species:

Human

Source:

E. coli

Format:

State: Liquid purified protein

Purity: >90% by SDS - PAGE

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

Description:

Recombinant human TPM1 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

AA Sequence:

MGSSHHHHH SSGLVPRGSH MDAIKKKMQM LKLDKENALD RAEQAEADKK AAEDRSKQLE
DELVSLQKKL KGTEDLDKY SEALKDAQEK LELAEEKATD AEADVASLNR RIQLVEEELD
RAQERLATAL QKLEAEKAA DESERGMKVI ESRAQKDEEK MEIQEIQLKE AKHIAEDADR
KYEEVARKLV IIESDLERAE ERAELSEGOV RQLEEQLRIM DQTLKALMAA EDKYSQKEDR
YEEEIKVLSD KLKEAETRAE FAERSVTKLE KSIDDLEDEL YAQKLKYKAI SEELDHALND MTSM
Molecular weight: kDa (304aa) , confirmed by MALDI-TOF (Molecular weight on SDS-PAGE will appear higher).

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.

Shelf life: one year from despatch.

General Readings:

Perry SV. (2001) J Muscle Res Cell Motil. 22(1):5-49.

Pictures:

Recombinant human TPM1, 1-284aa, His-tagged

