

**TPM4, 1-248aa, Human, His tag, E.coli**

**Cat.NO.: TP04287**

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3th Edition

**Synonyms:**Tropomyosin alpha-4 chain, Tropomyosin 4

**Description:**TPM4 belongs to the tropomyosin family. Tropomyosins are present in virtually all eukaryotic cells (both muscle and nonmuscle), where they bind actin filaments and function to modulate actin-myosin interaction and stabilize actin filament structure. TPM4 binds to actin filaments in muscle and nonmuscle cells and 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. Recombinant human TPM4 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

**Form:**Liquid. In 20mM Tris-HCl buffer(pH 8.0) containing 10% glycerol, 2mM DTT, 0.1M NaCl.

**Molecular Weight:**30.7 kDa (268aa), confirmed by MALDI-TOF

**Sequences:**

MGSSHHHHHSSGLVPRGSHMAGLNSLEAVKRKIQALQQQADEAEDRAQGLQRELDGERERREKAEGDVAALN  
RRIQLVEEELDRAQERLATALQKLEEAEKAADESERGMKVIENRAMKDEEKMEIQEMQLKEAKHIAEEADRKYEEV  
ARKLVILEGELERAEEAEVSELKCGDLEEEELKNVTNNLKSLEAASEKYSEKEDKYEEEEIKLLSDKLKEAETRAEFAE  
RTVAKLEKTIDDLEEKLAQAKEENVGLHQTLQTLNELNCI

**Purity:**> 95% by HPLC

**Concentration:**1 mg/ml (determined by Bradford assay)

**Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.