

Recombinant Human Tropomyosin 3, His-tagged

Cat. No. TPM3-4853H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human TPM3 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
Species	Human
Source	E.coli
ProteinLength	1-248 a.a.
Description	Tropomyosin alpha-3 chain, also known as TPM3, is member of the tropomyosin family of actin-binding proteins involved in the contractile system of striated and smooth muscles and the cytoskeleton of non-muscle cells. Tropomyosins are dimers of coiled-coil proteins that polymerize end-to-end along the major groove in most actin filaments. They provide stability to the filaments and regulate access of other actin-binding proteins. Mutations in this gene result in autosomal dominant nemaline myopathy, and oncogenes formed by chromosomal translocations involving this locus are associated with cancer.
Form	Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 10% glycerol, 0.1M NaCl.
Molecular Weight	31.6 kDa (272aa), confirmed by MALDI-TOF.
Purity	>90% by SDS-PAGE

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Concentration	0.5 mg/ml (determined by Bradford assay)
Sequences of amino acids	<p>MGSSHHHHHH SSGLVPRGSH MGSHMAGITT IEAVKRKIQV LQQQADDAEE RAERLQREVE GERRAREQAE AEVASLNRRI QLVEEELDRA QERLATALQK LEEAKEAADE SERGMKVIEN RALKDEEKME LQEIQLKEAK HIAEEADRKY EEVARKLVII EGDLETEREER AELAESRCRE MDEQIRLMDQ NLKCLSAEE KYSQKEDKYE EEIKILTDKL KEAETRAEFA ERSVAKLEKT IDDLEDKLLC TKEEHLCTQR MLDQTLDDLN EM</p>
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.
Pathways	Cardiac muscle contraction; Dilated cardiomyopathy; Hypertrophic cardiomyopathy (HCM); Muscle contraction; Pathways in cancer; Smooth Muscle Contraction; Striated Muscle Contraction; Thyroid cancer
GENE INFORMATION	
Gene Name	TPM3 tropomyosin 3 [Homo sapiens]
Official Symbol	TPM3
Synonyms	TPM3; tropomyosin 3; TM3; TRK; NEM1; TM-5; TM30; TM30nm; TPMsk3; hscp30; MGC3261; FLJ41118; MGC14582; MGC72094; OK/SW-cl.5; tropomyosin alpha-3 chain; hTM5; tropomyosin-3; tropomyosin-5; gamma-tropomyosin; tropomyosin gamma; OTTHUMP00000034016; OTTHUMP00000034018; OTTHUMP00000034019; OTTHUMP00000034020; OTTHUMP00000034021; OTTHUMP00000034171; OTTHUMP00000034172; OTTHUMP00000034173; OTTHUMP00000218067; OTTHUMP00000218071; cytoskeletal tropomyosin TM30; heat-stable cytoskeletal protein 30 kDa; Gamma-tropomyosin; Tropomyosin-3;

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Tropomyosin-5

Gene ID

7170

mRNA Refseq

NM_001043351

Protein Refseq

NP_001036816

MIM

191030

UniProt ID


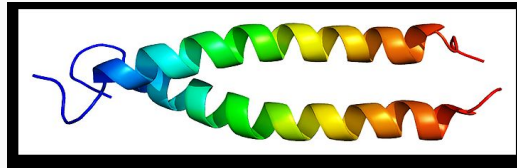

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**Chromosome
Location**

1q21.2

Function

actin binding; molecular function

**PDBrendering based
on 1mv4.** Tel: 1-631-559-9269 1-516-512-3133 Email: info@creative-biomart.com  Fax: 1-631-938-8127 45-1 Ramsey Road, Shirley, NY 11967, USA