

TPM1, 1-284aa, Human, His tag, E.coli

Cat.NO.: TP04284

3th Edition

Synonyms:TPM1, CMD1Y, HTM-alpha, TMSA, Tropomyosin-1, Alpha-tropomyosin, Tropomyosin alpha-1 chain

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

Form:Liquid. 20mM Tris-HCl buffer (pH8.0) containing 20% glycerol, 0.1M NaCl,1mM DTT

Molecular Weight:35.0 kDa (304aa), confirmed by MALDI-TOF (Molecular weight on SDS-PAGE will appear higher))

Sequences:

MGSSHHHHHSSGLVPRGSHMDAIKKKMQMLKLDKENALDRAEQAEADKKAEDRSKQLEDELVSLQKKLKGTE
DELDKYSEALKDAQEKLELAEKKATDAEADVASLNRRRIQLVEEELDRAQERLATALQKLEEAEKAADESERGMKVE
SRAQKDEEKMEIQEIQLKEAKHIAEDADRKYEEVARKLVIIESDLERAEEERAEELSEGQVRQLEEQLRIMDQTLKALMA
AEDKYSQKEDRYEEEEIKVLSDKLKEAETRAEFAERSVTKLEKSIDDLEDELYAQKLKYKAISEELDHALNDMTSM

Purity:> 95% by HPLC

Concentration:0.5 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.