PRODUCT INFORMATION

Expression system E.coli

Domain 1-248aa

UniProt No. P06753

NCBI Accession No. NP_705935.1

Alternative Names Tropomyosin alpha-3 chain, hscp30, NEM1, OK/SW-cl.5, TM-5, TM3, TM30 TM30nm, TPMsk, TRK

PRODUCT SPECIFICATION

Molecular Weight 31.6 kDa (272aa) confirmed by MALDI-TOF

Concentration 0.5mg/ml (determined by Bradford assay)

Formulation Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 20% glycerol, 0.1M NaCl

Purity > 85% by SDS-PAGE

Tag His-Tag

Application SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

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. Recombinant human TPM3 protein, fused to His-



tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH MGSH>MAGITT IEAVKRKIQV LQQQADDAEE RAERLQREVE GERRAREQAE AEVASLNRRI QLVEEELDRA QERLATALQK LEEAEKAADE SERGMKVIEN RALKDEEKME LQEIQLKEAK HIAEEADRKY EEVARKLVII EGDLERTEER AELAESRCRE MDEQIRLMDQ NLKCLSAAEE KYSQKEDKYE EEIKILTDKL KEAETRAEFA ERSVAKLEKT IDDLEDKLKC TKEEHLCTQR MLDQTLLDLN EM

General References

Ohtsuki I., et al. (2002) J Biochem. 131:739-743. Tiso N., et al. (1997) Biochem Biophys Res Commun. 230:347-350.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.