

## 32-7239: Recombinant Human Tropomyosin $\alpha$ -1 Chain/TPM1 (N-6His)(Discontinued)

**Gene :** TPM1  
**Gene ID :** 7168  
**Uniprot ID :** P09493

### Description

Source: E.coli.  
MW :35kD.

Recombinant Human Tropomyosin  $\alpha$ -1 is produced by our E.coli expression system and the target gene encoding Met1-Met284 is expressed with a 6His tag at the N-terminus. Tropomyosin  $\alpha$ -1 Chain (TPM1) is a member of the Tropomyosin family of highly conserved and widely distributed Actin-binding proteins involved in the contractile system of striated and smooth muscles and the cytoskeleton of non-muscle cells. TPM1 binds to Actin filaments in both muscle and non-muscle cells. It is one type of  $\alpha$ -helical chain that forms the predominant Tropomyosin of striated muscle. TPM1 plays a central role in association with the Troponin complex and the Calcium dependent regulation of vertebrate striated muscle contraction. Smooth muscle contraction is regulated by interaction with Caldesmon. In non-muscle cells, it is implicated in stabilizing the cytoskeleton Actin filaments. Defects in TPM1 are associated with type 3 Familial Hypertrophic Cardiomyopathy.

### Product Info

**Amount :** 10  $\mu$ g / 50  $\mu$ g  
**Content :** Supplied as a 0.2  $\mu$ m filtered solution of 20mM Tris, 1mM DTT, 100mM NaCl, 20% Glycerol, pH 8.0 .  
**Storage condition :** Store at -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.  
**Amino Acid :** MGSSHHHHHSSGLVPRGSHMDAIKKKMQMLKLDKENALDRAEQAEADKKAEDRSKQLEDELVSLQKKLK  
GTEDELDKYSEALKDAQEKLELAEKKATDAEADVASLNRRRIQLVEEELDRAQERLATALQKLEEAKEKADESER  
GMKVIESRAQKDEEKMEIQEIQKKEAKHIAEDADRKYEEVARKLVIIESDLERAEEAELSEGQVRQLEEQLRIMD  
QTLKALMAAEDKYSQKEDRYEEEEIKVLSDKLKEAETRAEFAERSVTKLEKSIDDELYAQKLKYKAISEELDHA  
LNDMTSM

### Application Note

**Endotoxin :** Less than 0.1 ng/ $\mu$ g (1 IEU/ $\mu$ g) as determined by LAL test.