

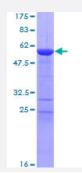
#### Full-Length

# TPM1 (Human) Recombinant Protein (P01)

Catalog # H00007168-P01

Size 25 ug, 10 ug

## Applications



Specification	
Product Description	Human TPM1 full-length ORF ( NP_001018008.1, 1 a.a 245 a.a.) recombinant protein with GST-ta g at N-terminal.
Sequence	MAGSSSLEAVRRKIRSLQEQADAAEERAGTLQRELDHERKLRETAEADVASLNRRIQLVEEELDR AQERLATALQKLEEAEKAADESERGMKVIESRAQKDEEKMEIQEIQLKEAKHIAEDADRKYEEVA RKLVIIESDLERAEERAELSEGKCAELEEELKTVTNNLKSLEAQAEKYSQKEDRYEEEIKVLSDKL KEAETRAEFAERSVTKLEKSIDDLEDQLYQQLEQNRRLTNELKLALNED
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	54.8
Preparation Method	in vitro wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCI, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.



### Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — TPM1	
Entrez GenelD	<u>7168</u>
GeneBank Accession#	<u>NM_001018008.1</u>
Protein Accession#	<u>NP_001018008.1</u>
Gene Name	TPM1
Gene Alias	C15orf13, CMD1Y, HTM-alpha, TMSA
Gene Description	tropomyosin 1 (alpha)
Omim ID	<u>115196 191010</u>
Gene Ontology	Hyperlink
Gene Summary	This gene is a member of the tropomyosin family of highly conserved, widely distributed actin-bind ing proteins involved in the contractile system of striated and smooth muscles and the cytoskeleto n 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. The encoded protein is one type of alpha helical chain that forms the predominant tr opomyosin of striated muscle, where it also functions in association with the troponin complex to r egulate the calcium-dependent interaction of actin and myosin during muscle contraction. In smoo th muscle and non-muscle cells, alternatively spliced transcript variants encoding a range of isofor ms have been described. Mutations in this gene are associated with type 3 familial hypertrophic c ardiomyopathy. [provided by RefSeq
Other Designations	alpha tropomyosin cardiomyopathy, hypertrophic 3 sarcomeric tropomyosin kappa tropomyosin 1 alpha chain

Pathway

# 😵 Abnova

- Cardiac muscle contraction
- Hypertrophic cardiomyopathy (HCM)

#### Disease

- Cardiomegaly
- <u>Cardiomyopathy</u>
- <u>Cardiovascular Diseases</u>
- Diabetes Mellitus
- Disease Progression
- Edema
- Genetic Predisposition to Disease
- <u>Metabolic Syndrome X</u>
- Tobacco Use Disorder