## **Recombinant Human PTMA Protein (GST Tag)**

#### Catalog No. PKSH031129

*Note:* Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Synonyms	TMSA
Species	Human
Expression Host	E.coli
Sequence	Ser 2-Asp 111
Accession	P06454-1
Calculated Molecular Weight	39.0 kDa
Observed molecular weight	45 kDa
Tag	N-GST
Bioactivity	Not validated for activity
Properties	
Purity	> 90 % as determined by reducing SDS-PAGE.
Endotoxin	Please contact us for more information.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.5 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 90 % as determined by reducing SDS-PAGE.

## Background

PTMA (prothymosin, alpha, N-GST chimera) is a small, 12.4 kDa protein. It is a 109-111 amino acid long polypeptide as the precursor of thymosin a1. Thymosins are named becaues they were originally isolated from the thymus. But now in

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many other tissues, thymosins also can be detected. Thymosins have diverse biological activities, and two in particular, thymosins a1 and \_4, have potentially important uses in medicine, some of which have already progressed from the laboratory to the clinic. In general, PTMA is associated with cellular proliferation and carcinogenesis (Eschenfeldt et al., 1986), cellular and viral transcription (Cotter et al., 2000), protection against apoptosis and chromatin remodelling (Karetsou et al., 1998). PTMA may have a dual role both intracellulary and extracellulary. In relation to diseases, thymosins have been categorized as biological response modifiers. Thymosin a1 is derived from PTMA. For animals that lack thymus glands, thymosin a1 is responsible for the activity of that preparation in restoring immune function.

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