

## Recombinant *S. cerevisiae* TIM14 Protein

Catalog No. PKSQ050085

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

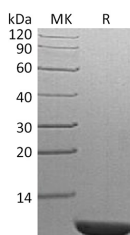
### Description

<b>Synonyms</b>	Mitochondrial import inner membrane translocase subunit TIM14;Presequencetranslocated-associated motor subunit PAM18;PAM18;TIM14
<b>Species</b>	<i>S. cerevisiae</i>
<b>Expression Host</b>	<i>E.coli</i>
<b>Sequence</b>	Phe99-Lys168
<b>Accession</b>	Q07914
<b>Calculated Molecular Weight</b>	7.9 kDa
<b>Observed molecular weight</b>	9 kDa
<b>Tag</b>	None

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of 20mM Tris-HCl, 300mM NaCl, pH 8.0. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

Mitochondrial import inner membrane translocase subunit TIM14 (TIM14) is an essential component of the PAM

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complex. PAM complex is required for the translocation of transit peptide-containing proteins from the inner membrane into the mitochondrial matrix in an ATP-dependent manner. In the complex, TIM14 is required to stimulate activity of mtHSP70 (SSC1). TIM14 belongs to the DnaJ family, which has been involved in Hsp40/Hsp70 chaperone systems. As a mitochondrial chaperone, TIM14 functions as part of the TIM23 complex import motor to facilitate the import of nuclear-encoded proteins into the mitochondria. TIM14 also complexes with prohibitin complexes to regulate mitochondrial morphogenesis, and has been implicated in dilated cardiomyopathy with ataxia.