

Recombinant *S. cerevisiae* TIM14 Protein

Catalog Number: PKSQ050085

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

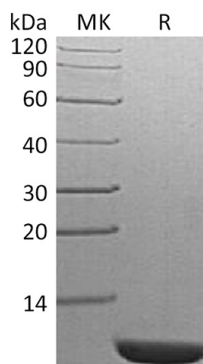
Description

Species	<i>S. cerevisiae</i>
Source	E.coli-derived <i>S. cerevisiae</i> TIM14 protein Phe99-Lys 168
Calculated MW	7.9 kDa
Observed MW	9 kDa
Accession	Q07914
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
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 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.
Reconstitution	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 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.

For Research Use Only