

Trigger factor Protein, E.coli (P.pastoris, His)

Cat. No.:	HY-P71813
Synonyms:	tig; Trigger factor; TF; EC 5.2.1.8; PPlase
Species:	E.coli
Source:	P. pastoris
Accession:	B7UJQ9 (M1-432A)
Gene ID:	58463319
Molecular Weight:	Approximately 60 kDa. The reducing (R) protein migrates as 60 kDa in SDS-PAGE maybe due to relative charge.

PROPERTIES

AA Sequence

MQVSVETTQG	LGRRVTTITIA	ADSIETAVKS	ELVNVAKKVR
IDGFRKGVKVP	MNIVAQRVGA	SVRQDVLGDL	MSRNFIDAII
KEKINPAGAP	TYVPGEYKLG	EDFTYSVEFE	VYPEVELQGL
EAI EVEKPIV	EVTDADV DGM	LDTLRKQQAT	WKEKDGAVEA
EDRVTIDFTG	SVDGEEFEGG	KASDFVLAMG	QGRMIPGFED
GIKGHKAGEE	FTIDVTFPEE	YHAENLKGKA	AKFAINLKKV
EERELPELTA	EFIKRFGVED	GSVEGLRAEV	RKNMERELKS
AIRNRVKSQA	IEGLVKANDI	DVPAALIDSE	IDVLRRAAQ
RFGGNEKQAL	ELPRELFEEQ	AKRRVVVGLL	LGEVIRTNEL
KADEERVKGL	IEEMASAYED	PKEVIEFYSK	NKELMDNMRN
VALEEQAWEA	VLA KAKVTEK	ETTFNELMNQ	QA

Appearance Lyophilized powder.

Formulation Lyophilized after extensive dialysis against solution in Tris-based buffer, 50% glycerol.

Endotoxin Level <1 EU/μg, determined by LAL method.

Reconstitution It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH₂O.

Storage & Stability Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

Shipping Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background

Trigger factor protein is integral to protein export, serving a dual role as a chaperone that aids in the proper folding of newly synthesized proteins and as a peptidyl-prolyl cis-trans isomerase. In its chaperone capacity, trigger factor plays a crucial role in maintaining the nascent polypeptide in an open conformation, facilitating the intricate process of protein folding. Simultaneously, its peptidyl-prolyl cis-trans isomerase activity contributes to the isomerization of prolyl peptide bonds, further refining the conformational landscape of the emerging protein. This multifaceted involvement underscores trigger factor's significance in the intricate orchestration of cellular protein homeostasis and export mechanisms.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA