Protein disulfide-isomerase A3 Human E. coli

Product Data Sheet

Type: Recombinant
Source: E. coli
Species: Human
Other names: 58 kDa glucose-regulated protein, 58 kDa microsomal protein, p58, Disulfide isomerase ER-60, Endoplasmic reticulum resident protein 57,

Cat. No.:
RD172333100 (0.1 mg)

Description

Total 490 AA. MW: 55.4 kDa (calculated). UniProtKB acc.no. P30101 (Ser25-Leu505). N-terminal His-tag (9 extra AA). Protein identity confirmed by LC-MS/MS.

Introduction to the Molecule

Protein disulfide-isomerase A3 is localized in endoplasmic reticulum. It catalyzes the rearrangement of disulfide bonds, both intrachain and interchain. It is a subunit of the peptide loading complex (PLC), which is a part of the major histocompatibility complex class I pathway. It plays role in protein folding and antigen processing and presentation.

Amino Acid Sequence

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MKHHHHHHAS DVLELTDDNF ESRISDTGSA GLMLVEFFAP WCGHCKRLAP EYEAAATRLK GIVPLAKVDC TANTNTCNKY
GVSGYPTLKI FRDGEEAGAY DGPRTADGIV SHLKKQAGPA SVPLRTEEEF KKFISDKDAS IVGFFDDSFS EAHSEFLKAA
SNLRDNYRFA HTNVESLVNE YDDNGEGIIL FRPSHLTNKF EDKTVAYTEQ KMTSGKIKKF IQENIFGICP HMTEDNKDLI
QGKDLLIAYY DVDYEKNAKG SNYWRNRVMM VAKKFLDAGH KLNFAVASRK TFSHELSDFG LESTAGEIPV VAIRTAKGEK
FVMQEEFSRD GKALERFLQD YFDGNLKRYL KSEPIPESND GPVKVVVAEN FDEIVNNENK DVLIEFYAPW CGHCKNLEPK
YKELGEKLSK DPNIVIAKMD ATANDVPSPY EVRGFPTIYF SPANKKLNPK KYEGGRELSD FISYLQREAT NPPVIQEEKP
KKKKKAQEDL
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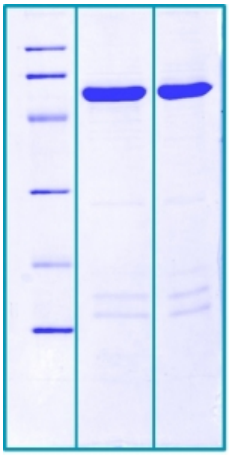
Source

E. coli

Purity

Purity as determined by densitometric image analysis: >90%

SDS-PAGE gel



14 % SDS-PAGE separation of Human Protein disulfide-isomerase A3:

1. M.W. marker - 14, 21, 31, 45, 66, 97 kDa

2. reduced and boiled sample, 2.5 µg/lane

3. non-reduced and non-boiled sample, 2.5 µg/lane

Endotoxin

< 1.0 EU/ug

Formulation

Filtered (0.4 µm) and lyophilized in in phosphate buffered saline pH 7.4

Reconstitution

Add 200 µl of deionized water to prepare a working stock solution of approximately 0.5 mg/ml and let the lyophilized pellet dissolve completely. Filter sterilize your culture media/working solutions containing this non-sterile product before using in cell culture.

Shipping

At ambient temperature. Upon receipt, store the product at the temperature recommended below.

Storage, Stability/Shelf Life

Store the lyophilized protein at -80 °C. Lyophilized protein remains stable until the expiry date when stored at -80 °C. Aliquot reconstituted protein to avoid repeated freezing/thawing cycles and store at -80 °C for long term storage. Reconstituted protein can be stored at 4 °C for a week.

Quality Control Test

BCA to determine quantity of the protein.
SDS-PAGE to determine purity of the protein.
LAL TEST to determine endotoxin level.

Applications

ELISA, Western blotting

Note

This product is intended for research use only.

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