

AR50024PU-S

Human HSPA5 / GRP78 (20-650, His-tag) - Purified

Alternate names:

78 kDa glucose-regulated protein, BiP, Endoplasmic reticulum luminal Ca(2+)-binding protein grp78, Heat shock 70 kDa protein 5, Immunoglobulin heavy chain-binding protein

Quantity:

0.1 mg

Concentration:

1 mg/ml (determined by Bradford assay)

Background:

Binding immunoglobulin protein (BiP) belongs to the family of ~70 kDa heat shock proteins (HSP 70). It is a stress response protein which is induced by agents or conditions that adversely affect endoplasmic reticulum (ER) function. This protein is essential for the proper glycosylation, folding as well as for the maintenance of cell homeostasis and the prevention of apoptosis.

Uniprot ID:

[P11021](#)

NCBI:

[NP_005338.1](#)

GeneID:

[3309](#)

Species:

Human

Source:

E. coli

Format:

State: Liquid purified protein

Purity: >90% by SDS - PAGE

Buffer System: 20 mM Tris pH 8.0, 10% glycerol

Description:

Recombinant human BiP protein, fused to His-tag at C-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

AA Sequence:

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MEEDKKEDVG TVVGIDLGTT YSCVGVFKNG RVEIIANDQG NRITPSYVAF TPEGERLIGD
AAKNQLTSNP ENTVFDKRL IGRTWNDPSV QQDIKFLPFK VVEKKTkPYI QVDIGGGQTK
TFAPEEISAM VLTkMKETAE AYLGKKVTHA VVTVPAYFND AQRQATKDAG TIAGLNMRI
INEPTAAIA YGLDKREGEK NILVFDLGGG TFDVSLTID NGVFEVVATN GDTHLGGEDE
DQRMMEHFik LYKKKTGKDV RKDNRAVQKL RREVEKAKRA LSSQHqARIE IESFYEGEDF
SETLTRAKFE ELNMDLFRST MKPVQKVLED SDLKKSIDE IVLVGGSTRI PKIQQLVKEF
FNGKEPSRGI NPDEAVAYGA AVQAGVLSGD QDTGDLVLLD VCPLTLGIET VGGVMTKLIP
RNTVVPTKKS QIFSTASDNQ PTVTIKvYEG ERPLTKDNHL LGTFDLTGIP PAPRGVPQIE
VTFEIDVNGI LRVTAEDKGT GNKNKITITN DQNRLTPEEI ERMVNDAEKF AEEDKKLKER
IDTRNELESY AYSLKNQIGD KEKLGGLSS EDKETMEKAV EEKIEWLESH QDADIEDFKA
KKKELEEIVQ PIISKLYGSA GPPPTGEEDT AELEHHHHHH
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Molecular weight: 71 kDa (640 aa)

Storage:

Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer.

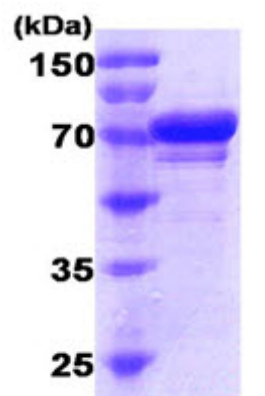
Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

General Readings:

Lee LC., et al. (2009) Clin Chim Acta. 400(1-2):56-62. Racek T., et al. (2008) J Biol Chem. 283(49):34305-14.

Pictures:



15% SDS-PAGE (3ug)