

# Recombinant human GRP78/HSPA5 protein

Catalog Number: ATGP2212

## PRODUCT INFORMATION

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**Expression system**

E.coli

**Domain**

19-654aa

**UniProt No.**

P11021

**NCBI Accession No.**

NP\_005338.1

**Alternative Names**

Heat shock protein family A member 5, Heat shock 70kD protein 5, HSP70 family protein 5, Glucose-regulated protein 78kD, Binding-immunoglobulin protein, BiP, Endoplasmic reticulum chaperone BiP, Glucose-regulated protein 78kDa, Immunoglobulin heavy chain-binding protein

## PRODUCT SPECIFICATION

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**Molecular Weight**

72.9 kDa (659aa)

**Concentration**

1mg/ml (determined by Bradford assay)

**Formulation**

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl, 20% glycerol, 1mM DTT

**Purity**

&gt; 90% by SDS-PAGE

**Tag**

His-Tag

**Application**

SDS-PAGE

**Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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**Description**

HSPA5 is a member of the heat shock protein 70 (HSP70) family. It is localized in the lumen of the endoplasmic reticulum (ER), and is involved in the folding and assembly of proteins in the ER. As this protein interacts with many ER proteins, it may play a key role in monitoring protein transport through the cell. Recombinant human HSPA5 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional

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chromatography techniques.

## Amino acid Sequence

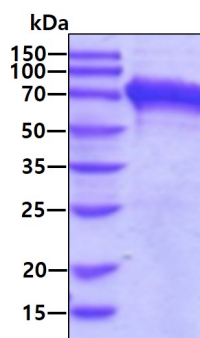
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VAFTPEGERL IGDAAKNQLT SNPENTVFDA KRLIGRTWND PSVQQDIKFL PFKVVEKTK PYIQVDIGGG QTKTFAPEEI  
SAMVLTKMKE TAEAYLGKKV THAVVTPAY FNDAQRQATK DAGTIAGLNV MRIINEPTAA AIAYGLDKRE GEKNILVFDL  
GGGTFDVSLL TIDNGVFEVV ATNGDTHLGG EDFDQRVMEH FIKLYKKKTG KDVRKDNRAV QKLRREVEKA KRALSSQHQA  
RIEIESFYEG EDFSETLTRA KFEELNMDLF RSTMKPVQKV LEDSDLKSD IDEIVLVGGS TRIPKIQQLV KEFFNGKEPS  
RGINPDEAVA YGAAVQAGVL SGDQDTGDLV LLDVCPLTLG IETVGGVMTK LIPRNTVVPT KKSQIFSTAS DNQPTVTIKV  
YEGERPLTKD NHLLGTFDLT GIPPAPRGVP QIEVTFEIDV NGILRVTAED KGTGNKNKIT ITNDQNRRLTP EEIERMVNDA  
EKFAEEDKKL KERIDTRNEL ESYAYSLKNQ IGDKEKLGK LSEDKETME KAVEEKIEWL ESHQDADIED FKAKKKELEE  
IVQPIISKLY GSAGPPPTGE EDTAEKDEL

## General References

Wang Q, Shu R, et al. (2012). *Int J Oncol.* 41(2):652-60.  
Sokolowska I, Woods AG, et al. (2012). *FEBS J.* 279(14):2579-94.

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.