

Product datasheet for AR09764PU-N

OriGene Technologies, Inc.

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

Product data:

Product Type: Recombinant Proteins

Description: HSPA5 / GRP78 (20-650, His-tag) human recombinant protein, 0.1 mg

Species: Human
Expression Host: Hi-5 insect

Expression cDNA Clone

or AA Sequence:

MEEDKKEDVG TVVGIDLGTT YSCVGVFKNG RVEIIANDQG NRITPSYVAF TPEGERLIGD AAKNQLTSNP ENTVFDAKRL IGRTWNDPSV QQDIKFLPFK VVEKKTKPYI QVDIGGGQTK TFAPEEISAM VLTKMKETAE AYLGKKVTHA VVTVPAYFND AQRQATKDAG TIAGLNVMRI

TFAPEEISAM VLTKMKETAE AYLGKKVTHA VVTVPAYFND AQRQATKDAG TIAGLNVMRI INEPTAAAIA YGLDKREGEK NILVFDLGGG TFDVSLLTID NGVFEVVATN GDTHLGGEDF DQRVMEHFIK LYKKKTGKDV RKDNRAVQKL RREVEKAKRA LSSQHQARIE IESFYEGEDF

SETLTRAKFE ELNMDLFRST MKPVQKVLED SDLKKSDIDE IVLVGGSTRI PKIQQLVKEF FNGKEPSRGI

NPDEAVAYGA AVQAGVLSGD QDTGDLVLLD VCPLTLGIET VGGVMTKLIP RNTVVPTKKS

QIFSTASDNQ PTVTIKVYEG ERPLTKDNHL LGTFDLTGIP PAPRGVPQIE VTFEIDVNGI LRVTAEDKGT GNKNKITITN DQNRLTPEEI ERMVNDAEKF AEEDKKLKER IDTRNELESY AYSLKNQIGD KEKLGGKLSS

EDKETMEKAV EEKIEWLESH QDADIEDFKA KKKELEEIVQ PIISKLYGSA GPPPTGEEDT

AE<u>LEHHHHHH</u>

Tag:His-tagPredicted MW:71 kDaConcentration:lot specific

Purity: >90%

Buffer: Presentation State: Purified

State: Liquid purified protein

Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 2 mM DTT, 200 mM

NaCl

Endotoxin: < 1 EU per 1ug of protein (determined by LAL method)

Preparation: Liquid purified protein

Protein Description: Recombinant human HSPA5 (BIP) protein, fused to His-tag at C-terminus, was expressed in

Hi-5 cell using baculovirus expression system and purified by using conventional

chromatography.





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Storage: Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

RefSeq: NP 005338

 Locus ID:
 3309

 UniProt ID:
 P11021

 Cytogenetics:
 9q33.3

Synonyms: 78 kDa glucose-regulated protein, Heat shock 70 kDa protein 5, BiP

Summary: The protein encoded by this gene is a member of the heat shock protein 70 (HSP70) family.

This protein localizes to the lumen of the endoplasmic reticulum (ER) where it operates as a typical HSP70 chaperone involved in the folding and assembly of proteins in the ER and is a master regulator of ER homeostasis. During cellular stress, as during viral infection or tumorogenesis, this protein interacts with the transmembrane stress sensor proteins PERK (protein kinase R-like endoplasmic reticulum kinase), IRE1 (inositol-requiring kinase 1), and ATF6 (activating transcription factor 6) where it acts as a repressor of the unfolded protein response (UPR) and also plays a role in cellular apoptosis and senescence. Elevated expression and atypical translocation of this protein to the cell surface has been reported in viral infections and some types of cancer cells. At the cell surface this protein may facilitate viral attachment and entry to host cells. This gene is a therapeutic target for the treatment of

coronavirus diseases and chemoresistant cancers. [provided by RefSeq, Jul 2020]

Protein Families: Druggable Genome

Protein Pathways: Antigen processing and presentation, Prion diseases

Product images:

