

## Recombinant Full Length Human HSPA5 Protein, His&Avi tagged, Biotinylated

Cat. No. HSPA5-02HB Lot. No. (See product label)

### SPECIFICATION

**Product Overview**

Biotinylated recombinant Full Length Human HSPA5 Protein with His&Avi tag was expressed in HEK293.

**Species**

Human

**Source**

HEK293

**ProteinLength**

19-654 aa

**Conjugation/Label**

Biotin

**Description**

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 tumorigenesis, 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

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	therapeutic target for the treatment of coronavirus diseases and chemoresistant cancers.
<b>Form</b>	Sterile PBS, pH7.4
<b>Molecular Mass</b>	74 kDa
<b>AASequence</b>	<p>GLNDIFEAQKIEWHEHHHHHHHHHEEEDKKEDVGTVVGIDLGTTYSCVGVFKNGR  VEIANDQGNRITPSYVAFTPEGERLIGDAAKNQLTSNPENTVFDKRLIGRTWNDPS  VQQDIKFLPFKVVVEKTKPYIQVDIGGGQTKTFAPEEISAMVLTKMKETAAYLGKKV  THAVVTVPAYFNDAQRQATKDAGTIAGLNMRIINEPTAAAIAYGLDKREGEKNILVF  DLGGGTFDVSLTIDNGVFEVVATNGDTHLGGEDFDQRMVMEFIKLYKKKTGKDVR  KDNRAVQKLRREVEKAKRALSSQHARIEIESFYEGEDFSETLTRAKFEELNMDLFR  STMKPVQKVLEDSDLKKSDIDEIVLVGGSTRIPKIQQLVKEFFNGKEPSRGINPDEAV  AYGAAVQAGVLSGDQDTGDLVLLDVCPLTLGIETVGGVMTKLIPRNTVVPTKKSQIFS  TASDNQPTVTIKVYEGERPLTKDNHLLGTFDLTGIPPAPRGVPQIEVTFEIDVNGILRV  TAEDKGTGNKNKITITNDQNRLTPEEIERMVNDAEKFAEEDKKLKERIDTRNELESYA  YSLKNQIGDKEKLGKLSSEDKETMEKAVEEKIEWLESHQDADIEDFKAKKKELEEIV  QPIISKLYGSAGPPPTGEEDTAEKDEL</p>
<b>Endotoxin</b>	< 1 EU/mg by LAL
<b>Purity</b>	>95% by SDS-PAGE
<b>Storage</b>	Store it under sterile conditions at -20 to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
<b>Concentration</b>	0.227 mg/mL by BCA
<b>Labeling Efficiency</b>	1.35 by HABA

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## GENE INFORMATION

**Gene Name** HSPA5 heat shock 70kDa protein 5 (glucose-regulated protein, 78kDa) [ Homo sapiens (human) ]

**Official Symbol** HSPA5

**Synonyms** HSPA5; heat shock 70kDa protein 5 (glucose-regulated protein, 78kDa); GRP78, heat shock 70kD protein 5 (glucose regulated protein, 78kD); 78 kDa glucose-regulated protein; BiP; immunoglobulin heavy chain-binding protein; endoplasmic reticulum luminal Ca(2+)-binding protein grp78; BIP; MIF2; GRP78; FLJ26106

**Gene ID** 3309

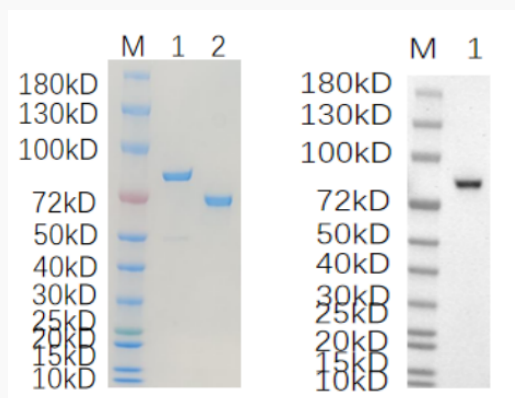
**mRNA Refseq** NM\_005347

**Protein Refseq** NP\_005338

**MIM** 138120

**UniProt ID** P11021

### SDS-PAGE and WB



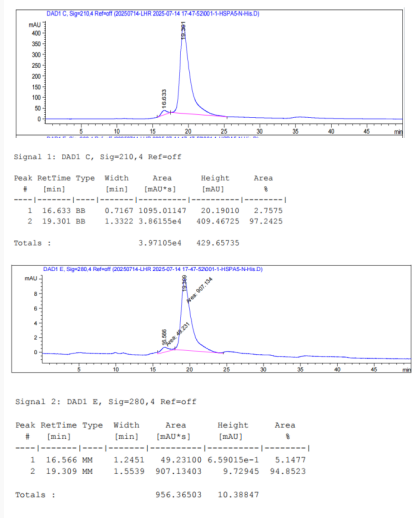
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1.HSPA5-N-His 1ug 2.BSA 1ug Reducing 4%-20% SDS-PAGE (CBB stained) and WB (Anti-His Mouse Monoclonal antibody) analysis profiles of purified HSPA5-N-His

**SEC-HPLC analysis  
profiles of purified  
HSPA5-N-His**



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