

Recombinant Human HspA5 Protein, C-His-tagged

Cat. No. HspA5-049H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human HspA5 protein with C-His tag was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	654
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 therapeutic target for the treatment of coronavirus diseases and chemoresistant cancers.
Form	Solution

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 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Molecular Mass	71 kDa
AA Sequence	MKLSLVAAMLLLLSAARAEEDKKEDVGTVVGIDLGTTYSCVGVFKNGRVEIIANDQ GNRITPSYVAFTPEGERLIGDAAKNQLTSNPENTVFDKRLIGRTWNDPSVQQDIKFL PFKVVEKKTTPYIQVDIGGGQTKTFAPEEISAMVLTKMKETAAYLGKKVTHAVVTVP AYFNDAQRQATKDAGTIAGLNVMRIINEPTAAAIAYGLDKREGEKNILVFDLGGGTFD VSLLTIDNGVFEVVATNGDTHLGGEDFDQVRMEHFIKLYKKKTGKDVRKDNRAVQKL RREVEKAKRALSSQHARIEIESFYEGEDFSETLTRAKFEELNMDLFRSTMKPVQKV LEDSDLKKSDIDEIVLVGGSTRIPKIQQLVKEFFNGKEPSRGINPDEAVAYGAAVQAG VLSGDQDTGDLVLLDVCPLTLGIETVGGVMTKLIPRNTVVPTKKSQIFSTASDNQPTV TIKVYEGERPLTKDNHLLGTFDLTGIPPAPRGVPQIEVTFEIDVNGILRVTAEDKGTGN KNKITITNDQNRLTPEEIERMVNDAEKFAEEDKKLKERIDTRNELESYAYSLKNQIGDK EKLGGKLSSSEDKETMEKAVEEEKIEWLESHQDADIEDFKAKKKELEEIVQPIISKLYGSA GPPPTGEEDTAEKDEL
Purity	> 90%
Applications	WB
Stability	This bioreagent is stable at 4 centigrade (short-term) and -70 centigrade(long-term). After reconstitution, sample may be stored at 4 centigrade for 2-7 days and below -18 centigrade for future use.
Storage	4°C
Concentration	1 mg/mL
Storage Buffer	Tris-HCl (pH 8). Sterile-filtered colorless solution.
Reconstitution	Reconstitute in sterile distilled H ₂ O to no less than 100 µg/mL; dilute reconstituted

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stock further in other aqueous solutions if needed. Please review COA for lot-specific instructions. Final measurements should be determined by the end-user for optimal performance.

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 lumenal 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

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