Active Recombinant Full Length Human HSPA5 Protein, C-Flag-tagged

Cat. No. HSPA5-52HFL **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Full Length Human HSPA5 Protein, fused to Flag-tag at C-terminus, was expressed in Mammalian cells.
Species	Human
Source	Mammalian Cells
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 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.
Form	25 mM Tris HCl, pH 7.3, 100 mM glycine, 10% glycerol.

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Bio-activity	Protein refolding WB positive control Ubiquitination substrate
Molecular Mass	72.2 kDa
AA Sequence	MKLSLVAAMLLLLSAARAEEEDKKEDVGTVVGIDLGTTYSCVGVFKNGRVEIIANDQ GNRITPSYVAFTP EGERLIGDAAKNQLTSNPENTVFDAKRLIGRTWNDPSVQQDIKF LPFKVVEKKTKPYIQVDIGGGQTKTF APEEISAMVLTKMKETAEAYLGKKVTHAVVT VPAYFNDAQRQATKDAGTIAGLNVMRIINEPTAAAIAYG LDKREGEKNILVFDLGGGT FDVSLLTIDNGVFEVVATNGDTHLGGEDFDQRVMEHFIKLYKKKTGKDVRK DNRAV QKLRREVEKAKRALSSQHQARIEIESFYEGEDFSETLTRAKFEELNMDLFRSTMKPV QKVLEDSD LKKSDIDEIVLVGGSTRIPKIQQLVKEFFNGKEPSRGINPDEAVAYGAAV QAGVLSGDQDTGDLVLLDVC PLTLGIETVGGVMTKLIPRNTVVPTKKSQIFSTASDN QPTVTIKVYEGERPLTKDNHLLGTFDLTGIPPA PRGVPQIEVTFEIDVNGILRVTAEDK GTGNKNKITITNDQNRLTPEEIERMVNDAEKFAEEDKKLKERID TRNELESYAYSLKN QIGDKEKLGGKLSSEDKETMEKAVEEKIEWLESHQDADIEDFKAKKKELEEIVQPI ISKLYGSAGPPPTGEEDTAEKDELTRTRPLEQKLISEEDLAANDILDYKDDDDKV
Purity	> 80% as determined by SDS-PAGE and Coomassie blue staining.
Stability	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
Storage	Store at -80 centigrade.
Concentration	>50 ug/mL as determined by microplate BCA method.
Preparation	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.

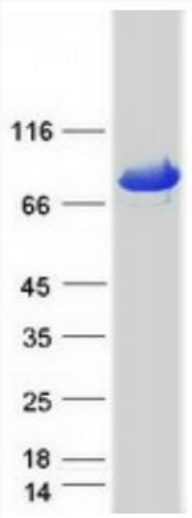
Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Protein Families	Druggable Genome
Protein Pathways	Antigen processing and presentation, Prion diseases
Full Length	Full L.

GENE INFORMATION

Gene Name	HSPA5 heat shock protein family A (Hsp70) member 5 [Homo sapiens (human)]
Official Symbol	HSPA5
Synonyms	BIP; GRP78; HEL-S-89n; MIF2
Gene ID	3309
mRNA Refseq	NM_005347.5
Protein Refseq	NP_005338.1
MIM	138120
UniProt ID	P11021

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA



Coomassie blue staining of purified HSPA5 protein.

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA