



## Product Datasheet

<b>Product Name</b>	Heat Shock Protein 105 Human Recombinant
<b>Cata No</b>	CB501412
<b>Source</b>	<i>Escherichia Coli.</i>
<b>Synonyms</b>	HSPH1, Heat Shock protein 105kDa, 110kDa protein 1, Heat shock 110 kDa protein, HSP110, HSP105 $\alpha$ , Antigen NY-CO-25, HSP105, HSP105A, HSP105B, KIAA0201, NY-CO-25, DKFZp686M05240.

### Description

HSPH1 analysis is used as an indicator and as a diagnostic aid in problematic lesions.

HSPH1 chaperones the responses to endoplasmic reticulum (ER) stress during its interactions with GRP78 and GSK3, and without HSP105 cell death following ER stress proceeds by a non-caspase-3-dependent process.

HSPH1 is highly expressed in a variety of human tumors.

HSPH1 is a mammalian member of the HSP105/110 family, a diverged subgroup of the HSP70 family. HSP105 has 2 isoforms, alpha and beta. Hsp105a associates with Hsp70/Hsc70 as complexes in vivo and regulates the chaperone activity of Hsp70/Hsc70 negatively in vitro and in vivo.

Recombinant HSPH1 produced in E.Coli is a single, non-glycosylated polypeptide chain containing 894 amino acids and having a molecular mass of 100 kDa. HSP105 alpha is fused with His tag and purified by conventional chromatography techniques.

### Physical Appearance

Sterile filtered colorless solution.

### Purity

Greater than 90.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

### Formulation

The HSP105 protein solution contains 20mM Tris-HCl, pH-8 and 50mM NaCl.

### Stability

Store at 4°C if entire vial will be used within 2-4 weeks.

Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

**Avoid multiple freeze-thaw cycles.**

### Sequence

MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD  
KDRWGSMSV GLDVGSQSCY IAVARAGGIE  
TIANEFSDRC TPSVISFGSK NRTIGV  
AAKN QQITHANNTV SNFKRFHGRA  
FNDPFIQKEK ENLSYDLVPL KNGGVGKVM  
YMGEHLFSV EQITAMLLTK LKETAENSLK  
KPVTDCVISV PSFFTDAERR SVLDAAQIVG  
LNCLRLMNDM TAVALNYGIY KQDLPSLDEK  
PRIVVFVDMG  
HSAFQVSACA FNKGKLVLG TAFDPFLGGK  
NFDEKLVEHF CAEFKTKYKL DAKSKIRALL  
RLYQECEKLL KLMSSNSTDL PLNIECFMND  
KDVSGKMNRS QFEELCAELL QKIEVPLYSL  
LEQTHLKVED VSAVEIVGGA TRIPAVKERI  
AKFFGKDIST TLNADEA  
VAR GCALQCAILS PAFKVREFSV TDAVPFPISL  
IWNHDESDTE GVHEVFSRNH AAPFSKVLTF  
LRRGPFLEA FYSDPQGVVY PEAKIGRFVV

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ASMVEKVPT  
ENEMSSEADM ECLNQRPPEN PDTDKNVQQD  
NSEAGTQPQV QTDAQQTSQS PPSPELTSEE  
NKIPDADKAN EKKVDQPPEA KKP KIKVVNV  
ELPIEANLVW QL GKDLLNMY IETEGKMIMQ  
DKLEKER NDA KNAVEEYVYE FRDKLCGPYE  
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