HSP60 Protein, Mouse (His)

Cat. No.:	HY-P73916
Synonyms:	60 kDa heat shock protein, mitochondrial; CPN60; HSP-60; HSPD1
Species:	Mouse
Source:	E. coli
Accession:	P63038 (L2-F573)
Gene ID:	15510
Molecular Weight:	Approximately 58 kDa

PROPERTIES

AA Sequence	L R L P T V L R Q M R P V S R A L A P H L T R A Y A K D V K F G A D A R A L M L Q G V D L L A D A V A V T M G P K G R T V I I E Q S W G S P K V T K D G V T V A K S I D L K D K Y K N I G A K L V Q D V A N N T N E E A G D G T T T A T V L A R S I A K E G F E K I S K G A N P V E I R R G V M L A V D A V I A E L K K Q S K P V T T P E E I A Q V A T I S A N G D K D I G N I I S D A M K K V G R K G V I T V K D G K T L N D E L E I I E G M K F D R G Y I S P Y F I N T S K G Q K C E F Q D A Y V L L S E K K I S S V Q S I V P A L E I A N A H R K P L V I I A E D V D G E A L S T L V L N R L K V G L Q V V A V K A P G F G D N R K N Q L K D M A I A T G G A V F G E E G L N L N L E D V Q A H D L G K V G E V I V T K D D A M L L K G K G D K A H I E K R I Q E I T E Q L D I T T S E Y E K E K L N E R L A K L S D G V A V L K V G G T S D V E V N E K K D R V T D A L N A T R A A V E E G I V L G G G C A L L R C I P A L D S L K P A N E D Q K I G I E I I K R A L K I P A M T I A K N A G V E G S L I V E K I L Q S S S E V G Y D A M L G D F V N M V E K G I I D P T K V V R T A L L D A A G V A S L L T T A E A V V T E I P K E E K D P G M G A M G G M G G G M G G G M F
Appearance	Solution.
Formulation	Supplied as a 0.22 μm filtered solution of PBS, pH 7.4.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	N/A.
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

DESCRIPTION

Background	The HSP60 protein plays a crucial role in mitochondrial protein import and macromolecular assembly. Along with Hsp10, it facilitates the proper folding of imported proteins and may also prevent misfolding while promoting the refolding and appropriate assembly of unfolded polypeptides generated during stressful conditions in the mitochondrial matrix. These chaperonins consist of heptameric rings formed by the large subunit Hsp60, which align in a back-to-back double ring configuration. Through a cyclic process, Hsp60 ring complexes bind one unfolded substrate protein per ring, followed by ATP binding and association with two heptameric rings of the co-chaperonin Hsp10. This leads to the encapsulation of the substrate protein within the inner cavity of Hsp60, allowing it to fold undisturbed by other cellular components for a certain period. Synchronized ATP hydrolysis in all Hsp60 subunits causes the dissociation of the chaperonin rings, releasing ADP and the properly folded substrate protein.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA