

Recombinant Heat Shock Protein 65 Mycobacterium Tuberculosis

Catalog No.	CRM133A CRM133B CRM133C	Quantity:	2 µg 10 µg 100 µg
Alternate Names:	Protein Cpn60-2, groEL protein-2, 65 kDa antigen, Heat shock protein 65, Cell wall protein A, Antigen A, groL2, groEL-2.		
Description:	Heat shock proteins induce pro-inflammatory cytokines. Mycobacterial HSPs participate in cytokine expression resulting from infection by <i>M. tuberculosis</i> . Furthermore, HSPs stabilize cellular proteins in response to various sources of stress or injury. HSP65 is one of the most essential defending immunogens against the tuberculosis infection. HSP65 is presented to human CD41 T cells in association with multiple HLA-DR molecules. The <i>M. tuberculosis</i> HSP65 signals through TLR4. Recombinant Mycobacterium Tuberculosis HSP65 is produced in E.coli and has a Mw of 57.4 kDa. The HSP65 protein is fused to His-Tag at N-Terminus and purified by standard chromatography techniques.		
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.		
Source:	<i>E. coli</i>		
Molecular Weight:	57.4 kDa		
Formulation:	The HSP65 protein was lyophilized from a concentrated (1 mg/ml) solution containing 10 mM Na-phosphate, pH-7.4, + 130 mM NaCl + 2.5 mM KCl.		
Purity:	> 95.0% as determined by RP-HPLC and SDS-PAGE analyses.		
Amino Acid Sequence:	HHHHHHGSAK TIAYDEEARR GLERGLNALA DAVKVTLGPK GRNVVLEKKW GAPTITNDGV SIAKEIELED PYEKIGAEV KEVAKTDDV AGDGTATV LAQALVREGL RNVAAGANPL GLKRGIEAVE KVTETLLKGA KEVETKEQIA ATAAISAGDQ SIGDLIAEAM DKVGNVGVIT VEESNTFGLQ LELTEGMRFD KGYISGYFVT DPERQEAVLE DPYILLVSSK VSTVKDLLPL LEKVIGAGKP LLIIEDVEGE ALSTLVVNKI RGTFSVAVK APFGDRRKA MLQDMAILTG GQVISEEVGL TLENADLSLL GKARKVVVTK DETTIVEGAG DTDIAIGRVA QIRQEIENSD SDYDREKLQE RLAKLAGGVA VKAGAATEVE LKERKHRIED AVRNAKAAVE EGIVAGGGVT LLQAAPTLDE LKLEGDEATG ANIVKVALEA PLKQIAFNSG LEPGVVAEKV RNLPAHGHLN AQTGVYEDLL AAGVADPVKV TRSALQNASI		
Reconstitution:	Reconstitute the lyophilized HSP-65 in sterile distilled water at not less than 100 µg/ml, which can be further diluted to other aqueous solutions.		
Storage & Stability:	Lyophilized HSP65 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution HSP65 may be stored at 2-4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid repeated freeze-thaw cycles.		

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