

Recombinant Mycobacterium Tuberculosis groEL2 protein, His-tagged

Cat. No. groEL2-33M Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant Mycobacterium Tuberculosis groEL2 fused with His tag at N-terminal was expressed in E. coli.
Species	Mycobacterium Tuberculosis
Source	E.coli
Description	Heat shock proteins induce pro-inflammatory cytokines. Mycobacterial HSPs participate in cytokine expression resulting from infection by M. tuberculosis. 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 M. tuberculosis HSP65 signals through TLR4.
Form	The HSP65 protein was lyophilized from a concentrated (1mg/ml) solution containing 10mM Na-phosphate pH-7.4, 130mM NaCl and 2.5mM KCl.
Molecular Mass	57.4 kDa
AA Sequence	HHHHHHGSAKTIAYDEEARRGLERGLNALADAVKVTLGPKGRNVVLEKKWGAPTIT NDGVSIAKEIELEDPYEKI GAELVKEVAKKTDDVAGDGTATVLAQALVREGLRNV AAGANPLGLKRGIEAVEKVTTETLLKGAKEVETKEQI AATAAISAGDQSIGDLIAEAMD KVGNEGVITVEESNTFGLQLELTEGMRFDKGYISGYFVTDPERQEAVLEDPY ILLVS SKVSTVKDLLP LLEK VIGAGKPLLIIEDVEGEALSTLVV NKIRGTFKSVAVKAPGFGDR

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RKAMLQDMAIL TGGQVISEEVGLTLENADLSLLGKARKVVVTKDETTIVEGAGDTDAI
 AGRVAQIRQEIENSDDSDYDREKLQERL AKLAGGVAVKAGAATEVELKERKHRIEDA
 VRNAKAAVEEGIVAGGGVTLTLLQAAPTLDLDELKLEGDEATGANIVKVA LEAPLKQIAFNS
 GLEPGVVAEKVRNLPAGHGLNAQTGVYEDLLAAGVADPVKVTRSALQNASIAGLFLT
 TEAVV ADKPEKEKASVPGGGDMGGMDF

Purity Greater than 95.0% as determined by SDS-PAGE.

Stability Lyophilized HSP65 although stable at room temperature for 3 weeks, should be stored desiccated below -18 centigrade. Upon reconstitution HSP65 should be stored at 4 centigrade between 2-7 days and for future use below -18 centigrade. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Storage Storage at -70 centigrade

Reconstitution It is recommended to reconstitute the lyophilized HSP-65 in sterile 18MΩ-cm H₂O not less than 100g/ml, which can then be further diluted to other aqueous solutions.

GENE INFORMATION

Gene Name [groEL2 molecular chaperone GroEL \[Mycobacterium tuberculosis H37Rv \]](#)

Official Symbol [groEL2](#)

Synonyms groEL-2; groL2; hsp60; hsp65; molecular chaperone GroEL

Gene ID [886354](#)

mRNA Refseq

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Protein Refseq NP_214954

MIM

UniProt ID P9WPE7

Pathway RNA degradation, organism-specific biosystem; RNA degradation, conserved biosystem; Tuberculosis, organism-specific biosystem

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