

# **Product Datasheet**

Product Name Heat Shock Protein 65 Mycobacterium Tuberculosis Recombinant

Cata No CB500768

Source Escherichia Coli.

Synonyms 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 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.

Recombinant Mycobacterium Tuberculosis HSP65 produced in E.coli

## **Physical Appearance**

Sterile Filtered White lyophilized (freeze-dried) powder.

## **Formulation**

The HSP65 protein was lyophilized from a concentrated (1mg/ml) solution containing 10mM

Na-phosphate pH-7.4, 130mM NaCl and 2.5mM KCl.

## **Solubility**

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

#### **Stability**

Lyophilized HSP65 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution HSP65 should be stored at 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).

Please prevent freeze-thaw cycles.

## **Purity**

Greater than 95.0% as determined by:

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