

## Recombinant Heat Shock Protein-70, Mycobacterium Tuberculosis

Cat.No:DAG560

Lot. No. (See product label)

### PRODUCT INFORMATION

<b>Storage</b>	Store lyophilized product at -20oC. After reconstitution, store at -20oC. Avoid multiple freeze/thaw cycles.
<b>Antigen Description</b>	The 70 kilodalton heat shock proteins (Hsp70s) are a family of ubiquitously expressed heat shock proteins. Proteins with similar structure exist in virtually all living organisms. The Hsp70s are an important part of the cell's machinery for protein folding, and help to protect cells from stress.
<b>Source</b>	E. coli.
<b>Buffer</b>	Lyophilized from 10mM Sodium phosphate, pH 7.4 containing 130mM Sodium chloride, 2.5mM Potassium chloride
<b>Concentration</b>	Not applicable
<b>Applications</b>	Suitable for use in ELISA and Western blot. Each laboratory should determine an optimum working titer for use in its particular application. Other applications have not been tested but use in such assays should not necessarily be excluded.
<b>Form</b>	Purified, Lyophilized. Reconstitute with distilled water.
<b>Preservative</b>	None
<b>Purity</b>	>95% pure (SDS-PAGE)
<b>Key words</b>	HSP-70, M. tuberculosis; Heat Shock Protein-70, Mycobacterium tuberculosis; 70 kilodalton heat shock proteins; Hsp70s; Hsp70; Mycobacterium tuberculosis; MTB; DnaK type molecular chaperone HSP70 1; Heat shock 70 kDa protein 1; Heat shock 70 kDa protein 1/2; Heat shock 70 kDa protein 1A/1B; Heat shock 70kDa protein 1A; Heat shock 70kDa protein 1B; Heat shock induced protein; HSP70 1; HSP70 2; HSP70-1/HSP70-2; HSP70.1; HSP70.1/HSP70.2; HSP70I; HSP71_HUMAN; HSP72; HSPA1; HSPA1A; HSPA1B; Mycobacteriaceae; Mycobacterium

### Background

<b>Introduction</b>	Mycobacterium tuberculosis (MTB) is a pathogenic bacterial species in the genus Mycobacterium and the causative agent of most cases of tuberculosis (TB). First discovered in 1882 by Robert Koch, M. tuberculosis has an unusual, waxy coating on its cell surface (primarily mycolic acid), which makes the cells impervious to Gram staining, so acid-fast detection techniques are used, instead. The physiology of M. tuberculosis is highly aerobic and requires high levels of oxygen. Primarily a pathogen of the mammalian respiratory system, MTB infects the lungs. The most frequently used diagnostic methods for TB are the tuberculin skin test, acid-fast stain, and chest radiographs.
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