

# Recombinant Protein Technical Manual Recombinant Human HSP40/DNAJB1 Protein (His Tag) RPES2501

### **Product Data:**

**Product SKU:** RPES2501 **Size:** 10μg

Species: Human Expression host: E. coli

Uniprot: P25685

### **Protein Information:**

Molecular Mass: 39.1 kDa

AP Molecular Mass: 38 kDa

**Tag:** C-6His

**Bio-activity:** 

**Purity:** > 90 % as determined by reducing SDS-PAGE.

**Endotoxin:**  $< 1.0 \text{ EU per } \mu\text{g}$  as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.

Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 µm filtered solution of 20mM PB,150mM NaCl,1mM

EDTA,pH7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:** 

**Synonyms:** DnaJ Homolog Subfamily B Member 1; DnaJ Protein Homolog 1; Heat Shock 40

kDa Protein 1; HSP40; Heat Shock Protein 40; Human DnaJ Protein 1; hDj; DNAJB1;

DNAJ1; HDJ1; HSPF1

# **Immunogen Information:**

Sequence: Gly2-Ile340

# Background:

DnaJ Homolog Subfamily B Member 1 (DNAJB1) is a member of the heat shock protein family. Heat shock proteins (HSPs) are a highly conserved family of stress response proteins. HSPs function primarily as molecular chaperones, facilitating the folding of other cellular proteins, preventing protein aggregation, or targeting improperly folded proteins to specific degradative pathways. DNAJB1 regulates cellular processes by aiding in the folding, transport and assembly. DNAJB1 contains a J-domain which controls interaction with the ATPase domain of DnaK. DNAJB1 interacts with HSP70 and can stimulate its ATPase activity. In addition, DNAJB1 stimulates the association between HSC70 and HIP.