

---

**MATERIAL DATA SHEET**

---

**Recombinant Human His6 HSP40/DNAJB1****Cat. # AP-110**

Heat shock protein 40 (HSP40, also known as DNAJB1) is the human homologue of the bacterial DnaJ heat shock protein. 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. Heat Shock Proteins are ubiquitously expressed in all organisms, and they are induced in response to various types of environmental stresses like heat, cold, and oxygen deprivation. HSP40 is a stress inducible chaperone that colocalizes with HSP70 and can bind unfolded proteins and prevent protein denaturation and aggregation. The conserved amino terminal J domain can interact with HSP70 and stimulate its ATPase activity. HSP40 and HSP70 are required to target some misfolded proteins to the Ubiquitin E3 ligase CHIP (Stub1) for subsequent ubiquitination. This recombinant human protein contains a C-terminal His<sub>6</sub> tag.

**Product Information**

<b>Quantity:</b>	50 µg
<b>MW:</b>	39 kDa
<b>Source:</b>	<i>E. coli</i> -derived Contains a C-terminal 6-His tag Accession # Q6FHS4
<b>Stock:</b>	X mg/ml (X µM) in 50 mM HEPES pH 7.5, 100 mM NaCl, 1 mM TCEP
<b>Purity:</b>	>95%, by SDS-PAGE under reducing conditions and visualized by Colloidal Coomassie® Blue stain.

**Use & Storage**

<b>Storage:</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"><li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li><li>• 6 months, -20 to -70 °C under sterile conditions after opening.</li></ul>
-----------------	---

## Literature

### References:

1. Chien V., et. al. (2010) Biochem J. 432: 113-121
2. Hinault M.P., et. al. (2010) J Biol. Chem. 285: 38173-38182
3. Minami Y., et. al. (1996) J Biol. Chem. 271: 19617-19624
4. Qiu X.B., et. al. (2006) Cell Mol. Life. Sci. 63: 2560-2570

*For research use only. Not for use in humans.*