

HDJ1, human recombinant protein**HSP-40, HSP40, DnaJ, DNAJB1, HSPF1, Hdj1, DnaJ homolog subfamily B member 1, Heat shock 40 kDa prote****Catalog # PBV10471r****Specification**

HDJ1, human recombinant protein - Product infoPrimary Accession [P25685](#)**HDJ1, human recombinant protein - Additional Info**Gene ID **3337**Gene Symbol **DNJB1****Other Names**

HSP-40, HSP40, DnaJ, DNAJB1, HSPF1, Hdj1, DnaJ homolog subfamily B member 1, Heat shock 40 kDa protein 1, Heat shock protein 40, DnaJ protein homolog 1, HDJ-1, Sis1.

Gene Source **Human**Source **E. coli**Assay&Purity **SDS-PAGE; ≥95%**Assay2&Purity2 **HPLC; ≥95%**Recombinant **Yes****Format**

Liquid

Storage

-80°C; In 50 mM Tris-HCl, pH 7.7, containing 100 mM potassium chloride

HDJ1, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

HDJ1, human recombinant protein - Images**HDJ1, human recombinant protein - Background**

Hsp40/Hdj1 is a cytosolic co-chaperone belonging to the class DnaJ, named after its homolog in E. coli. Hsp40 functions in protein folding by binding nascent peptides and unfolded substrates and facilitating substrate interaction with Hsp70. Binding of Hsp40 to Hsp70 increases Hsp70 ATP hydrolysis and substrate binding, which is reversed by the action of nucleotide exchange factors

(GrpE in *E. coli*). Repeated cycles of Hsp40/Hsp70 peptide binding and ATP hydrolysis prevent premature folding and aggregation, promoting protein maturation throughout the cell.

HDJ1, human recombinant protein - References

Raabe T., et al. *Nucleic Acids Res.* 19:6645-6645(1991).
Ohtsuka K., et al. *Biochem. Biophys. Res. Commun.* 197:235-240(1993).
Hata M., et al. *Genomics* 38:446-449(1996).
Ota T., et al. *Nat. Genet.* 36:40-45(2004).
Grimwood J., et al. *Nature* 428:529-535(2004).