PRODUCT INFORMATION

Expression system E.coli

Domain 1-340aa

UniProt No. P25685

NCBI Accession No. NP_006136

Alternative Names

Heat shock 40 kDa protein 1, DNAJB1, DNAJ1, HDJ1, HSPF1, HSP40 (DNAJ), Heat shock 40 kDa protein 1, Heat shock protein 40, HSP40, DnaJ protein homolog 1, HDJ-1, DnaJ homolog subfamily B member 1, Heat shock 40 kDa protein 1, radial spoke 16 homolog B (Chlamydomonas), Hsp40, Sis1, RSPH16B,

PRODUCT SPECIFICATION

Molecular Weight

40.2 kDa (360aa) confirmed by MALDI-TOF

Concentration 1mg/ml (determined by Bradford assay)

Formulation Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity > 90% by SDS-PAGE

Endotoxin level < 1 EU per 1ug of protein (determined by LAL method)

Tag His-Tag

Application SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

Human HSP40 (heat shock protein with molecular size of 40kDa) is one of the mammalian homologues of bacterial DnaJ heat shock protein and regulates cellular processes by aiding in the folding, transport and



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assembly. HSP40 protein contains the J-domain which controls interaction with the ATPase domain of DnaK. Recombinant human HSP40, his-tagged, is overexpressed in E. coli and purified by using the conventional column chromatography techniques.

Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH> MGKDYYQTLG LARGASDEEI KRAYRRQALR YHPDKNKEPG AEEKFKEIAE AYDVLSDPRK REIFDRYGEE GLKGSGPSGG SGGGANGTSF SYTFHGDPHA MFAEFFGGRN PFDTFFGQRN GEEGMDIDDP FSGFPMGMGG FTNVNFGRSR SAQEPARKKQ DPPVTHDLRV SLEEIYSGCT KKMKISHKRL NPDGKSIRNE DKILTIEVKK GWKEGTKITF PKEGDQTSNN IPADIVFVLK DKPHNIFKRD GSDVIYPARI SLREALCGCT VNVPTLDGRT IPVVFKDVIR PGMRRKVPGE GLPLPKTPEK RGDLIIEFEV IFPERIPQTS RTVLEQVLPI

General References

Hata M, Okumura K, Seto M, Ohtsuka K. (1996). Genomics 38(3): 446-9 Manishkumar and Debashis Mitra. (2005). Journal of Biological Chemistry 280(48): 40041-40050.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.