SUPPLEMENTARY MATERIAL

corresponding to:

Stem cell protection mechanisms in planarians: the role of some heat shock genes

MARIA-EMILIA ISOLANI, MARIA CONTE, PAOLO DERI and RENATA BATISTONI*

*Address correspondence to: Renata Batistoni. Dipartimento di Biologia, Unità di Biologia Cellulare e dello Sviluppo, Università di Pisa, S. S. Abetone e Brennero, 4, 56127 Pisa, Italy. Tel: +39-050-221-1492. Fax: +39-050-221-1495. E-mail: rbatistoni@biologia.unipi.it

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DjsHSP    ------------------------------------------------------------
SmedsHSP  MFRFLDEPIFNSLYWPEYSHHVIYPKRNNLWSTSIPITGYQPNEIAIKEEKTEEGEVKII 60


DjsHSP    --------------------PSNVDNENLRSIMTKDGVLVLKAPYKNTESSSVNPIKLNR 40
SmedsHSP  VHAKHVNEEDFSEFKKCIKIPKNVDHENLRSTMTKEGLLVLKAPYKISEDSVVKPIKINR 120
                              *.***:***** ***:*:******** :*.* *:***:**

DjsHSP    EDNWNGIWGELGRLNDQMNQMIDFGGIFSHHPRTEFVADDNKESGTWRMKVNVGKDFTSD 100
SmedsHSP  EDTWSGIWGELGRLNDQMNHMIDFGGALSHQPRVEFVPDENKESGTWRMTINVGKDFKSD 180
          **.*.**************:****** :**:**.***.*:*********.:******.**

DjsHSP    DIKLKHQNNEIHLEAKKESKGQDSISSRYIKEVLTLPEGIEQDKIHSKLMDNGQLIIEAP 160
SmedsHSP  DIKLRHQNNEIYLEAKKETKTDNSSSSRYIKEVLSLPEGIEEDKLNSKLLDNGQLVIEAP 240
          ****:******:******:* ::* **********:******:**::***:*****:****

DjsHSP    CKKMPNLIRGDEGKVIPVESGDISKMAINNEC 192
SmedsHSP  CKKMPSIGHDDKGKVIPVESDESTKMAVDN-- 270
          *****.: :.*:********.: :***::*
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Supplementary Fig. 1. Amino acid sequence comparison of sHSPs from *D. japonica* and *S. mediterranea*. *Djshsp: partial predicted amino acid sequence of a gene cloned in* D. japonica *(accession number FR754509). Smedshsp: predicted amino acid sequence of a gene identified by in silico analysis in* S. mediterranea *(genomic region v31.015798). The grey region represents the conserved α-crystallin core domain.*

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MGKDYYSILGTQKGASDDEIKKAYRKMALKYHPDKNKSPNAEAKFKEIAEAYEVLSDPKK 60
KEIYDKYGEEGLKGGMGGGSDGSGGPGGFTYTFHGDPREIFKNFFGTDDPFANIFGNHSR 120
RRGADNFMDVDDDFHPGISLFSGFNTGGGSFPHAQMKQDPPIYHDLSVSLEDVLSGTLKK 180
IKITRKRPSPAGNSLIDEEKILEIDVKKGWKAGTKITFPREGDKYLTDNIPADIVFVIKD 240
RTHRHFKRDGCDIRIKVKISLKDALCGIPNLQIPTLENQMINLPINTVIKPDTQKRIPGR 300
GLPDNKNPSRRGDIVVEFEIIFPDSLTDNAKKVIKQSLPDFSPSY                345
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Supplementary Fig. 2. Deduced amino acid sequence of Smedhsp40/DnaJ, identified by *in silico* analysis in *S. mediterranea*. *Blue characters indicate the conserved J domain at the N terminus. The Gly/Phe-rich region is in red characters.*