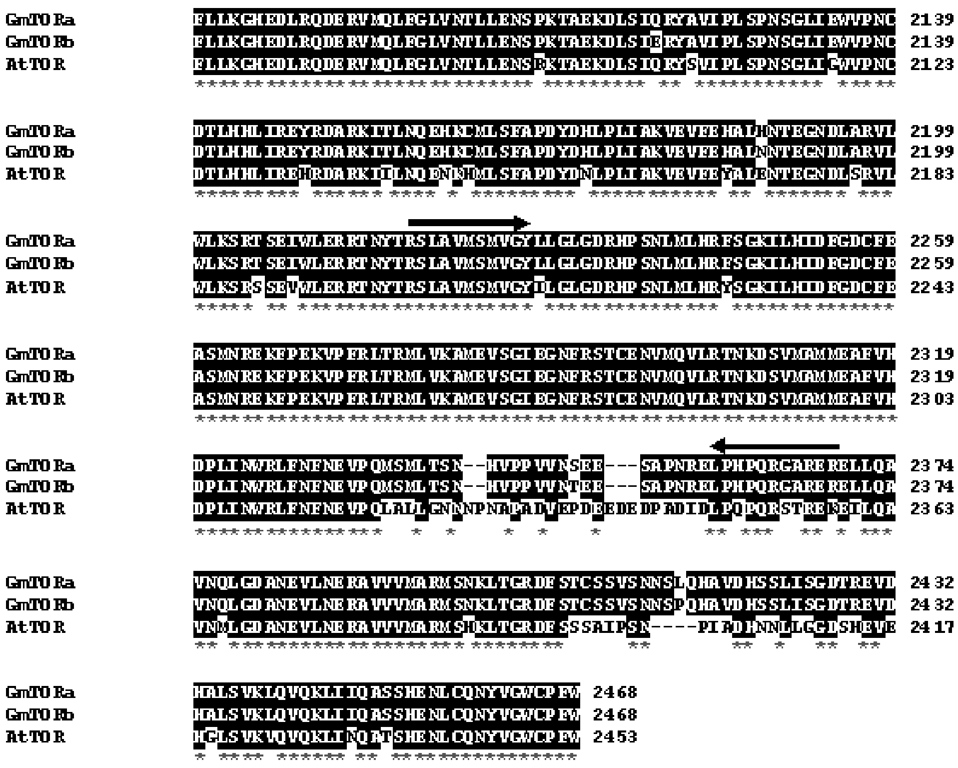
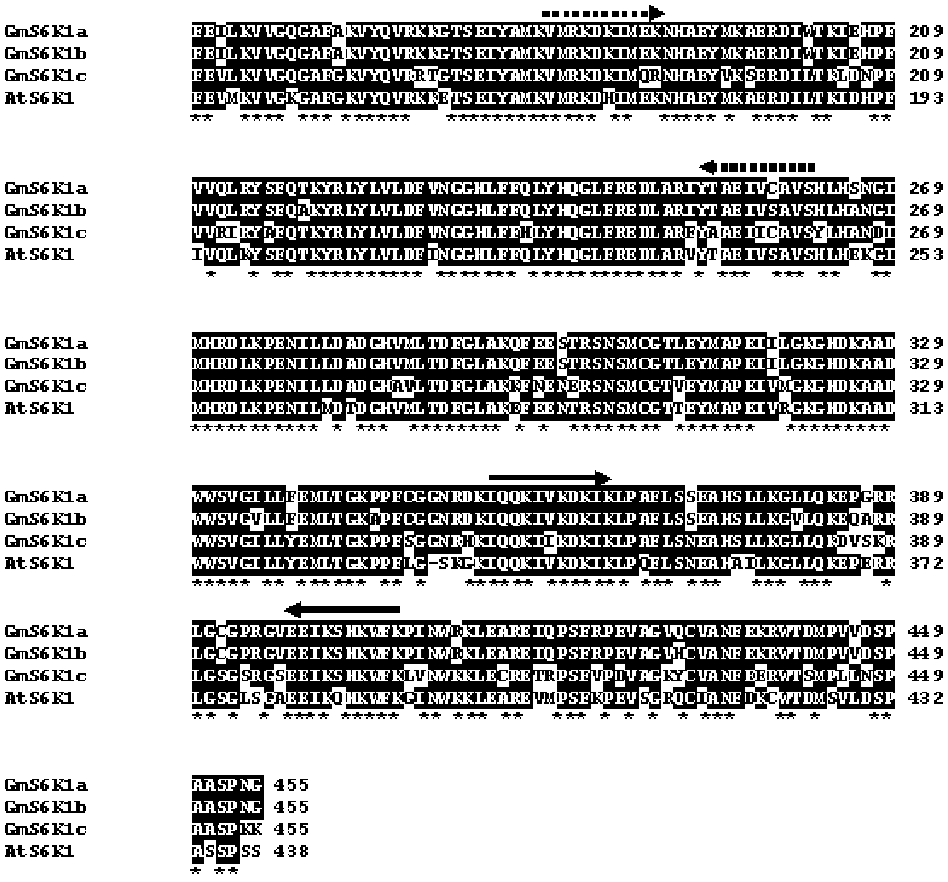
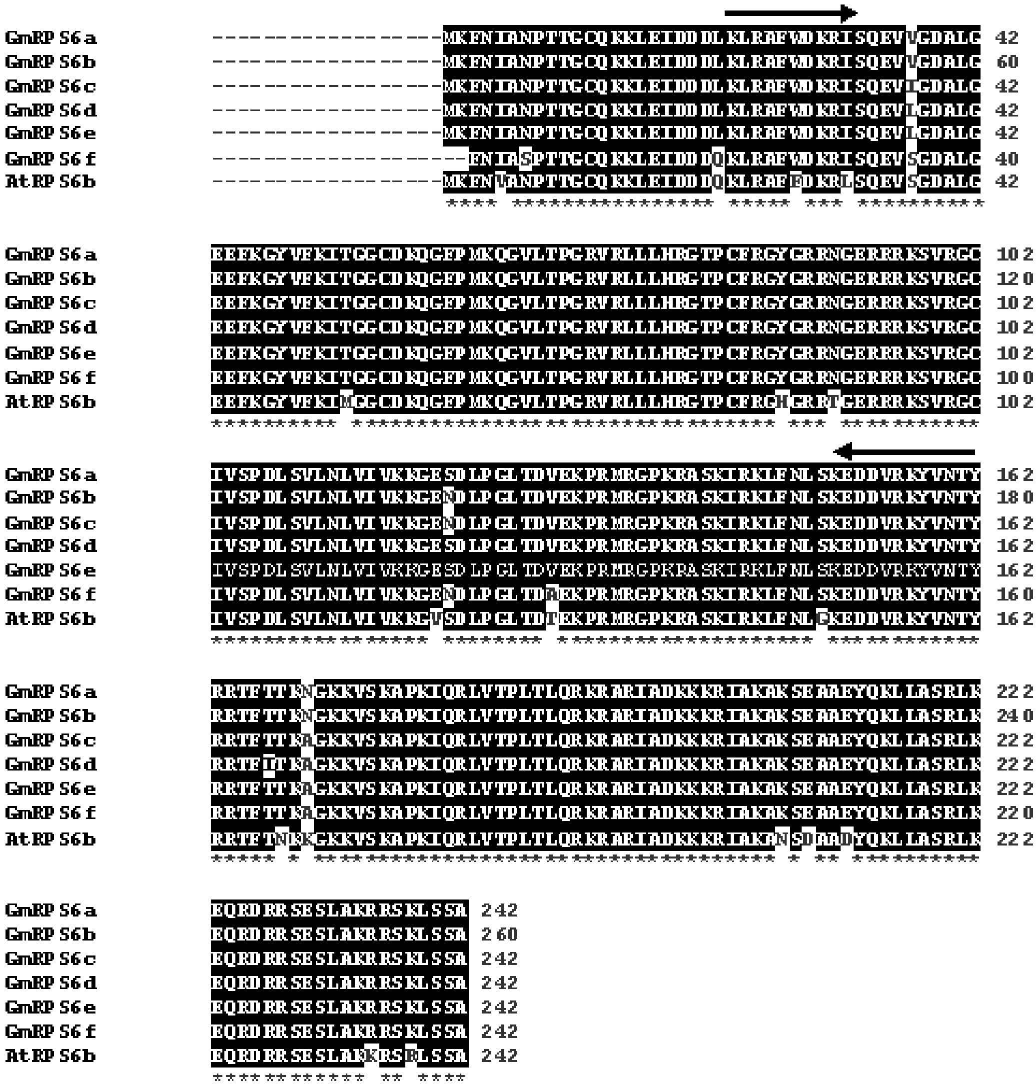
Um *et al.*, Supplementary Figure 1



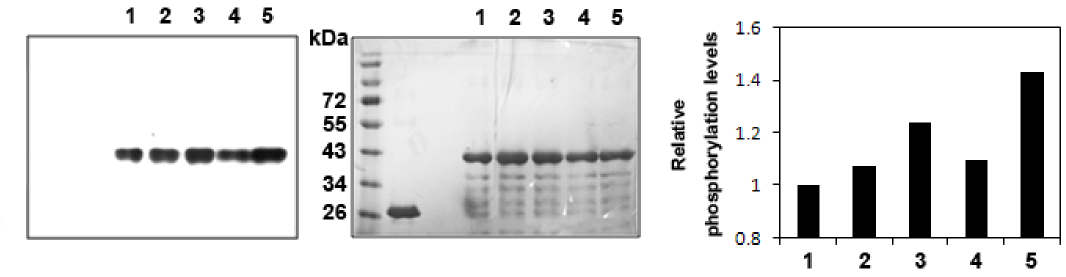
Um *et al.*, Supplementary Figure 2



Um *et al.*, Supplementary Figure 3



Um *et al.*, Supplementary Figure 4



Um *et al.*, Supplementary Figure 5

Spot #1,3: cytosolic glutamine synthetase GSbeta1 [Glycine max]

1 MSLLSDLINL NLSDTTEK**VI** **AEYIWIGGSG** **MDLR**SKAR**TL** **PGPVSDPSEL**
51 **PK**WNYDGSST GQAPGEDSEV ILYPQAIFRD PFRRGNNILV ICDAYTPAGE
101 PIPTNKRHAA AKVFSHPDVV AEVPWYGIEQ EYTLLQKDIQ WPLGWPVGGF
151 PGPQGPYYCG VGADKAFGRD IVDAHYKACI YAGINISGIN GEVMPGQWEF
201 QVGPSVGISA GDEIWAARYI LER**ITEIAGV** **VVSFDPKPIK** GDWNGAGAHT
251 NYSTK**SMRED** **GGYEVIK**AAI DKLGKKHKEH IAAYGEGNER RLTGRHETAD
301 INTFLWGVAN RGASVRVGRD TEKAGKGYFE DRRPASNMDP YVVTSMIADT
351 TILWKP

Spot #2: cytosolic glutamine synthetase beta2 [Glycine max]

1 MSLLSDLINL NLSDTTEKVI AEYIWIGGSG MDLRSKAR**TL** **PGPVSDPSKL**
51 **PKWNYDGSST** **GQAPGEDSEV** **IIYPQAIFR**D PFRRGNNILV ICDTYTPAGE
101 PIPTNKRHDA AKVFSHPDVV AEETWYGIEQ EYTLLQKDIQ WPLGWPVGGF
151 PGPQGPYYCG VGADKAFGR**D** **IVDAHYK**ACL YAGINISGIN GEVMPGQWEF
201 QVGPSVGISA GDEVWAARYI LERIIEIAGV VVSFDPKPIQ GDWNGAGAHT
251 NYSTKSMR**ND** **GGYEVIK**TAI EKLGKRHKEH IAAYGEGNER RLTGRHETAD
301 INTFLWGVAN RGASVRVGRD TEKAGKGYFE DRRPASNMDP YVVTSMIADT
351 TILWKP

Spot #4,5: heat shock protein 90-2 [Glycine max]

1 MASETETFAF QAEINQLLSL IINTFYSNKE IFLR**ELISNA** **SDALDKIRFE**
51 **SLTDK**SKLDA QPELFIHIIP DKTNNTLSII DSGIGMTKAD LVNNLGTIAR
101 SGTKEFMEAL AAGADVSMIG QFGVGFYSAY LVADKVIVTT KHNDDEQYVW
151 ESHAGGSFTV TRDTSGENLG RGTKITLFLK EDQLEYLEER RLKDLIKKHS
201 EFISYPISLW IEKTTEKEIS DDEDEEEKKD EEGKVEDVDE DKEKEEKKKK
251 TIK**EVSHEWS** **LVNK**QKPIWM R**KPEEITKEE** **YAAFYKSLTN** **DWEEHLAVKH**
301 **FSVEGQLEFK** AVLFIPKRAP FDLFDTKKKP NNIKLYVRRV FIMDNCEELM
351 PEYLSFVKGI VDSEDLPLNI SREMLQQNKI LKVIRKNLVK KCIEMFFEIA
401 ENKEDYNKFY EAFSKNLKLG IHEDSQNKTK LAELLRYHST KSGDEMTSLK
451 DYVTRMKEGQ NDIYYITGES KKAVENSPFL EKLKKKGFEV LYMVDAIDEY
501 AVGQLKEFEG KKLVSATKEG LKLDESEDEK KKKEELKEKF EGLCHVIKDV
551 LGDKVEKVVV SDRVVDSPCC LVTGEYGWTA NMERIMKAQA LRDSSMAGYM
601 SSKKTMEINP ENPIMEELRK RADADKNDKS VKDLVLLLFE TALLTSGFSL
651 DDPNTFGNRI HRMLKLGLSI DEDAGEADAD MPPLEDADAD AEGSKMEEVD

Spot #6: early-responsive to dehydration 2 [Arabidopsis halleri subsp.]

1 MAGKGEGPAI GIDLGTTYSC VGVWQHDRVE IIANDQGNRT TPSYVAFTDS
51 ERLIGDAAKN QVAMNPVNTV FDAKRLIGRI FSNASVQSDM KLWPFKIIPG
101 QEDKPMILVN YKGEEKQFAA EEISSMVLVK MREIAEAYLG SSIKNAVVTV
151 PAYFNDSQRQ ATKDAGVIAG LNVLRIINEP TAAAIAYGLD KKATSVGNKN
201 VLIFDLGGGT FDVSLLTIEE GIFEVKATAG DTHLGGEDFD NRMVNHFVQE
251 FKRKNKKDIS GNPRALRRLR TACERAKRTL SSTAQTTIEV DSLFEGIDFY
301 SPITRARFEE MNMDLFRKCM EPVEKCLR**DA** **NMNKNTIHDV** **VLVGGSTR**IP
351 K**VQQLLQNFF** **NGK**ELCK**SIN** **PDEAVAYGAA** **VQAAILSGEG** **NEK**VQDLLLL
401 DVTPLSLGIE TVGGVMTTLI QRNTTIPTKK EQVFTTNADN QPGVLIQVYE
451 GERARTKDNN ILGKFELSGI PPAPRGVPQF TVCFDIDSNG ILNVSAEDMA
501 TGKKNKITIT NGKGRLSKDD IEKMVQDAEK YKYEDEEHKK NVEAKNRLEN
551 YAYNMRNTIC DIGDKLPAVD KKKIEDSIEE AMQWLDGNQL AEADEFEDKM
601 KELESVYNPI ITKMYQGGMD EE

Spot #7: putative TCP-1/cpn60 chaperonin family protein (ISS) [Ostreococcustauri]

1 XXRLASFVGA MAIGDLVKST LGPKGMDKIL QSVQKGRQVT VTNDGATILK
51 SIYVDNPAAK VLVDISKAQD DEVGDGTTSV VVFASELLRQ AEQLVAQHVH
101 PMTIIQGFRE ACEAAKAALE ETARDNAGSK EKFEEDLMNI AKTTLSSKIL
151 THDKEHFAR**L** **AVDAVLR**LKG SGDLEMIQVI QKPGGNLKDS FLDEGFILDK
201 RFGVGQPKRI ENAKILIANT PMDTDKIKIY GARVRVDSMA KVADIEQAER
251 EKMKRKCEKI IGYGINCFIN RQLIYNYPEQ IFTEAGVAAI EHADFDGIER
301 LALVTGGDIC STFDNPEDVQ LGGCDLIEEI MIGEDRLIRF SGVAKGEACT
351 IVLRGASEHI LGEAERSLHD ALCVLTSTVK DSRVIYGGGC SEMIMSKAVE
401 ELAAKTPGKR SLAMECFAKA LR**AIPTIICD** **NAGLDSADIV** **SQMR**AAHAEG
451 DKKAGVNVLT GEVGDMQQCG VVECFRVKQQ VLLSATEAAE MIIRVDDIIK
501 STPRQRE

Spot #8: glyceraldehyde-3-phosphate dehydrogenase [Glycine max]

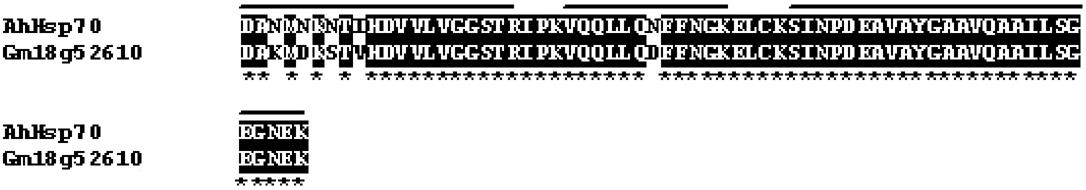
1 MGKVKIGING FGRIGRLVAR VALQRDDVEL VAVNDPFITT DYMTYMFKYD
51 SVHGHWKHHD VTVKDEK**TLL** **FGDKPVTIFG** **HR**NPEEIPWG STGADIIVES
101 TGVFTDKDKA AAHLKGGAKK **VIISAPSK**DA PMFVVGVNEH EYKPELDIIS
151 NASCTTNCLA PLAKVINDR**F** **GIVEGLMTTV** **HSITATQK**TV DGPSAKDWRG
201 GR**AASFNIIP** **SSTGAAK**AVG K**VLPALNGK**L TGMAFR**VPTV** **DVSVVDLTVR**
251 LEKEASYDEI KNAIKEESEG KLKGILGYTE DDVVSTDFIG DSRSSIFDAK
301 AGIALNKNFV KLVSWYDNEW GYSSRVIDLL VFVAKKSL

Spot #9: putative auxin efflux carrier [Zea mays]

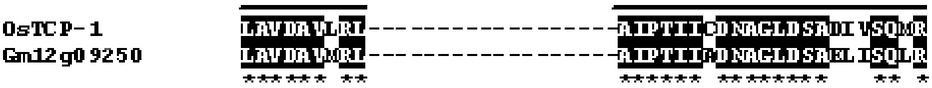
1 MITGTDFYHV MTAMVPLYVA MILAYGSVRW WRIFTPDQCS GINRFVALFA
51 VPLLSFHFIS TNNPYTMNIR FIAADTLQKL IVLALLTAWS YLSRRGCLEW
101 TITLFSLSTL PNTLVMGIPL LKGMYGDFSG SLMVQIVVLQ CIIWYTLMLF
151 MFEYRGARIL ITEQFPDTAG AIASIVVDPD VVSLDGRNDA IETEAEVKED
201 GKIHVTVRRS NASRSDIYSR RSMGFSSTTP RPSNLTNAEI YSLQSSRNPT
251 PRGSSFNHTD FYSMVGRSSN FAAGDAFGLR TGATPRPSNY EEDPQGKANK
301 YGQYPAPNPA MAAQPAKGLK KAANGQAKGE DGKDLHMFVW SSSASPVSDV
351 FGNGAAEYND AAAVKEVRMA VASPRKVAAD GRKERGEDFA ERDDFSFGNR
401 GAAERDAEAG DEK**AAAAAAA** **AQGNAGAVAA** **PAAMPPTSVM** **TR**LILIMVWR
451 KLIRNPNTYS SLIGLIWSLV CFRWNFEMPA IILKSISILS DAGLGMAMFS
501 LGLFMALQPR IIACGNKVAT FAMAVRFLTG PAVMAAASFA VGLRGTLLHV
551 AIVQAALPQG IVPFVFAKEY GVHPDILSTA VIFGMLIALP ITLVYYILMG
601 L

Um *et al.*, Supplementary Figure 6

A. Spot #6: early-responsive to dehydration 2, identity: 92% (60/65)



B. Spot #7: putative TCP-1/cpn60 chaperonin family protein, identity: 80% (25/31)



C. Spot #9: putative auxin efflux carrier, identity: 69% (22/32)