

Figure S2



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Species/Abbrv					
I	1. ISSude1: 2. ISCa5: 3. ISPasp3:	ISYANEHDATAAKRYLPA---MKANSSVI GDKGYVSKLATFLTKF-GVNLN AIQRSNM GEDK ---DCFIKRRLRKKV ETVFSIITGRFGN -VIKAT SIDGFL TKLKFITAY SMDCFL KLSDDDEKQLSI-----			
4. ISSde7: 5. ISSod20: 6. ISVs6: 7. ISPlu11: 8. ISPlu6: 9. ISXne5: 10. IS1592: 11. IS1599: 12. ISNeu1: 13. ISNeu2: 14. ISLbp3: 15. ISAb6: 16. ISWpi16: 17. ISPasp1: 18. ISPasp2: 19. ISFlt4: 20. IS195: 21. ISPas1: 22. ISCca1: 23. ISCca4: 24. ISAlw19: 25. ISAlw20: 26. ISAb4: 27. ISAcsp2:	TPANTHDT---KPVSG--MVVNAMDKLYAD DKGYISKALASEELLEQ -GVTLVNNVRKNM KKVK -LSLWDRAMLSRRFII ETINDQLKNISQIEHSRHR SVHGFM LNMIGGLIAY QLKES---KPQLNITDVDFNAISVMA- TPANVHDT---KPMNE--MVRSDMDKLYAD DKGFIASKALSEELQE K-GVTLVTVNRKNM EKV -MSLWDRAMLSRRFII ETINDQLKNISQIEHSRHR SGHGM LNMIAGLIAY QLKD-----KPQLNITSAEFNIAVMAR- TAGNVNDR---TPVPD-LCKELSGKLYAD DKGYIGKKLSES SLKNS-DVDLVTTSRKNM KAKE -ISAFDKAML SKRYI ETINDQLKNISQIEHSRHR SVGFM LNVISGVVAY CLKKQ---KPRIKLECEFELILA- TPGNVDR---EPVRE-LSKSLTGYLY GDKGYSQELADDLAKI -GVTFIT KKRRN M QA -LSEWNMLKKRFI ETINGQLKTISQIEHSRHR IKGFL LCVLGGGLIAY SLKLK---KPSLKIFYSEKDILMTA- TPGNVDR---EPVRE-LSKELTGSLLY GDKGYSQELADDLAKT -DVTFIT KKRRN M ASM -QAEWDKIMLK KKRFI -ETINGQLKTISQIEHSRHR IKGFLLCVLGGGLIAY CLKLK---KPSLKVFYSEDDFSMTD- TAGNQDR---QPVRA-LTKGLTGCLY GDKGYSQALCDE LEAE-GVTLTINVRNNM KTKA -LSLWDRLMLRRFL ETVVDQLKNISQIEHSRHR SQLGFL LEVAAGLIA TFQPK---KPSLNLNRDNEIAIFKRS- TPGNIIDR---PLRQG-LANDIFGKLF GDRGYV SQDLK DKLFNDF ITKLRRN MKQ Q QI -LKPIDEALLNGRS ETVFD EL NLCQIEHSRHR FTGFAANLLAGL IA CWFPF---KPTLKNVSAYGQAKN- TAGNTDR---VPVKD-MATPVFGKV GDRGYISKALNAWLTHKS D TLT KLRRN MK P Q L-LKPM DEV LNHRSL VETVFGEL KLN CQIEHSRHR SV G F IT INLLS GLIAY CWFPY---KPTIKNMPQQGVATL- TAGNVDR---KPMPO-LCQGLFGQL FADKGYL LAQWL TEADQ Q-NLQL ITPLRK N M R P V-RTRFE KVILRR RS IE TVF DEL KLN CQIEHSRHR SL IV LN MA GIV AY CLSDN---KPTLNLTTRVNSLAKA- TAGNVDR---KPMPO-LCQGLFGQL FADKGYL LAQWL TEADQ R-NLQL ITPFKK N M K P P-RTGF EKAILRR SL IE TVF DEL KLN CQIEHSRHR FF V V LN MA GIVAY CLSDN---KPTLNLTTRVNTLVKA- TPGNVDR---NLKVIFPLSKN IY GKLF GDRGYISKQSLFES LY E K-GIQL ITLKKKN M R N KL -IPF V D KILLR K RAI IES V N DEL K N I CQIEHSRHR S FF W AVN L SGLV A F S FF PK---KPSLNLRSKDNLQLLSP- TAGNVDR---KVLPODIEHSKLF GDRGYV G KNWKS H LAEV -GVL Q LI ITRVR K N M P Q V-LAP F D H AV L R S R K M G L T I FA AL T Y A L V L V NGY K S G I Q Q I L K P I D L N S A----- TPGNVDR---KPLPT-LTKR LT GL F GDKG Y I K KE LF K F D -GLK L V T K V K G M N K I E TVF DS L K N K F E I E H TR R H R S V T N L S G I A Y SMQS----- TPGNVDV---SMAET-LSKGLFGKLF GDKGYSQ KL TES LL E Q -GLE EL FT S V R A N M K Q K L -MTF N D K ILLR K R S L I E TV N D Q L K N I S Q I E HT R H R S V N F I V N L M G I A Y CLSDN---KPTLNLTTRVNTLVKA- TPGNVADV---SIAET-LSKGLFGKLF GDKGYSQ KL EL SKR LL K Q -GLE EL FT T L R S N M K Q N L -M K L T D K ILLR K R A I E TV N D Q L K N I S Q I E HT R H R N A G N F I N L LAG I A Y THQPK---KPSINLTEQHRLLLMAA- SPGNKDR---SFLTK-LCKGLG LV F GDRGYISKD KA Q L L E Q -GLK L IT T L K K N I K K V P -K TR F E K A M L K R S I I E T I F D Y L K N V T L W H T R H R S I N N P F T H L M A L A Q F I I N P I --KINNSKSLSMK- TPGNCDR---EPLKDG T F K N I L F G K I L A D R G Y I S Q N L F D R L F V D -DIHM T K I K N M N S L M H L Y D K V L L R K A I E TV N D M L K N V C Q I E HT R H R S V N F T V N L I S G I A Y NILPK---KPELNIEIIRNPNFPIAS- MSKATTDR---VVLPK-MAENLT G K Y I G D K G Y I S Q K L F D Y E K -GLQ L IT K R N M K N K I V L M K K R G I ----- TPGRVKDR---FPAKS-LCKNL I G K V F S D K G Y I S K E L F K L M E K -GIEL L IT H I K N M K N A F -MTL W D K L M L R K R S I I E T I I D Q L K N I S Q I E HT R H R S V N F T V N L I S G I A Y ----- TPGSVHNDV---AVLES-LTQ E L K G I L L G D K G Y I S K A K E A L A A R -GLK I LT T P S R R N M K N K P I Q T E E K Q L L C R G L I E TV N D Q L K N I S Q I E HT R H R S V N F M V N I M A V A Y CLNP----- TPGSVHNDV---AVLES-LTQ E L K G I L L G D K G Y I S K A E T A L A R -GLR I LT T P S R R N M K N K P I Q T E E K Q L L C R G L I E TV N D Q L K N I S Q I E HT R H R S V N F M V N I M A V A Y CLNP----- LNGHIALD---KKVED-LVNGL S T V Y G D R G Y I S Q L K E T L K Q E -GIDL L ITY P R N M R V T L -LPF S E D F L R Q R K I E T L I G L K E Y H L V T S K R S I A G F L G V F S L C A Y Q L C K N - KPKIHVKSLAYP----- LNGHVADI---KMVEQ-LVAGIEAL Y G D R G Y I S Q E L K I R L K D Q - GIDL L ITY H R K N M R A I Q - LCASDEYHL R Q R N K I E T L S F L K G Q Y N L V T S Q A R S L H G F L S G I Y A S L C A Y Q L T H Q N - KPTIQIKESSA----- 28. ISDge8: 29. ISDds4: 30. ISDds5:	RPANEHD T V G C V M Q D W P A Y G R N G V L R Q V R S R T G P K Q I GDKG Y Q S G T Y L T P K N A K R S D P - RWKEE-YAAARK T I E S A F S V L V - GSLRWGQVK T L V S L C L K V A L V LA H N L K F D L S P ----- 31. ISCe2: 32. ISCe3: 33. ISGsp1: 34. ISGh1: 35. ISBs1: 36. IS19: 37. ISEfml1: 38. IS233A: 39. IS982: 40. IS982C: 41. ISLi1: 42. IS982B: 43. ISLi2: 44. ISLgar2: 45. ISLgar3: 46. ISLhet1: 47. ISLhet7: 48. ISLhet5: 49. ISLhet11: 50. ISLpl4: 51. ISMu5: 52. ISSa4: 53. ISScr1: 54. ISSpy2: 55. ISSsu12:	ADPKIGEREAAMVLLAHQHLLST G K F A G C D E F G I S H E L G V E L P R D R N K E A H R Y - GDLGG R Q W V E S V F D T L K Q L G L E H R A R S P G V Y A K G L K L A S V I W H N R I G A D K R S L T A Y D H ----- 32. ISCe2: 33. ISCe3: 34. ISGsp1: 35. ISBs1: 36. IS19: 37. ISEfml1: 38. IS233A: 39. IS982: 40. IS982C: 41. ISLi1: 42. IS982B: 43. ISLi2: 44. ISLgar2: 45. ISLgar3: 46. ISLhet1: 47. ISLhet7: 48. ISLhet5: 49. ISLhet11: 50. ISLpl4: 51. ISMu5: 52. ISSa4: 53. ISScr1: 54. ISSpy2: 55. ISSsu12:	ADPKIGEREAAMVLLAHQHLLST G K F A G C D E F G I S H E L G V E L P R D R N K E A H R Y - GDLGG R Q W V</b	