

Table S1

GroL	L E N V T L D K ctt gaa aac gtc acg tta gac aag V G F D I L N R gta ggc ttc gac att tta aac agg V E D A L N A T R gtt gaa gac gcg ctc aac gcc acg cgc V G G V T E A E V K gtt ggt ggc gtc acc gaa gct gaa gtt aag Q L L F G V D A R cag ctt ttg ttt ggc gtc gac gcc aga G I D L A V D E V A K ggt att gat ttg gca gtc gac gag gtg gcc aag D T T T I V D G G G S K gac acc aca acc atc gtt gac ggc ggg ggc agt aag A V A T G A N P V D L K gct gtg gca act ggc gcc aac ccc gta gac ctt aaa A M A P P A V V G D E R gct atg gcg ccg ccg gct gtt gtc gga gac gag cgc D R V E D A L N A T R gac agg gtt gaa gac gcg ctc aac gcc acg cgc V G G D G V I T V E E A R gtc ggg ggc gac ggc gtc ata acg gtt gaa gag gca agg Q I G L D I A E A M Q R cag att ggg cta gat att gct gaa gcg atg caa cgc A Q W Q D S A S D Y E R gcc cag tgg cag gac agc gcg tcc gac tac gag agg Y G D M L A M G I V D P V K tac ggc gac atg ctt gct atg ggc att gtg gac cca gtt aag V L E S G S S F G Y D A Q A G R gtg cta gag tcc ggc tcg tcg ttt ggt tat gat gcg caa gcc ggc cgc M V C E L D N P Y V L L Y D R atg gtg tgc gag ctg gac aac ccc tac gtg ctg ctg tac gac aga E I E L G D K F E N V G A Q M V R gaa ata gag ctg ggc gac aag ttt gaa aac gtc gga gct caa atg gtt cga I S S L Q A L V P L L E T V V Q T N R att tca agc ttg cag gcg ctc gtg ccc ctg cta gag acg gtg gtg cag acc aac agg
DnaK	V V D F L A S Q F K gta gtc gac ttc ctg gcg tca cag ttt aaa R Y D D E L V Q R cga tac gac gac gag ctg gtt cag cgc D A G T I A G L E V L R gac gcg ggc aca ata gcg ggc ctc gag gtg ctg aga L E A L V D D L I Q K ctt gaa gcg tta gta gac gac cta att cag aaa N Q A E S L V Y S A E K aac caa gct gaa agc ctg gtg tat tcg gcg gaa aaa T T P S V V A I T E A G D K acg acg ccg tcc gta gta gca ata acc gaa gct ggc gac aag A Y S P A Q V S A M V L S K gct tac tcg ccg gcg cag gtg tcg gcg atg gtg ctg tca aaa A K L E A L V D D L I Q K gct aaa ctt gaa gcg tta gta gac gac cta att cag aaa Q A V T N P H N T F Y A V K caa gct gta acc aac cca cac aac acg ttc tac gcc gtt aag I I N E P T A A A L A Y G L E K ata ata aac gag cca acg gcg gca gcg ctg gcg tac ggg cta gag aag S T N G D T F L G G E D F D A R tca aca aac ggc gac acg ttt tta gga ggt gaa gac ttc gac gcc aga S Q V F S T A E D G Q S A V T I K tcg cag gtg ttt tca acg gca gaa gac ggc cag tca gcg gta aca ata aag V I G I D L G T T N S C V A I A E G K gta ata ggc att gat ttg ggc acg acc aac tcg tgc gta gca ata gcc gaa ggc aag G V N P D E V V A V G A A I Q A G V L Q G D V K ggt gtg aat ccc gac gaa gtt gta gcc gtg ggc gca gcc ata caa gcc ggc gtg ctc caa ggc gac gta aaa V E L S S A P T T E V N L P F I T A S Q A G A K gtg gag ctg tcg tca gct cca acc aca gaa gtg aac ttg ccg ttt att act gcg tct caa gcc ggc gcc aag A T A E A H L G E A V T Q A V I T V P A Y F S D A Q R gcc aca gcc gaa gcc cat ctc ggg gag gcg gtg acg caa gcc gta atc acg gtg ccg gcg tac ttt agc gac gcc cag cgc

HisD	S D S P G F G E F V K tca gac tcg cct ggt ttt ggc gag ttt gtt aaa T Y V T W L P T A R acg tac gtc act tgg ctg ccg act gcg cgc I V G P G N A F V A A A K att gtg ggg ccg ggc aac gcg ttt gtg gct gcg gcc aaa F A S G L S V L D F M K ttt gcg tcc ggg ctg tcg gtg ctg gac ttt atg aag F A P D I D L E T V D V K ttt gcg ccc gac atc gat ctg gag act gtg gac gtg aaa P M L A L A P A C A A C A S A E G L S C H A L A S A S R cca atg ctg gcg ctg gcg cca gcg tgc gct gcg tgc gcg tcc gct gaa ggc ttg tcg tgt cac gct ctg gca tcg gct agc agg L T S A G A V F L G G G S P I V V G D Y V G G T N H T L P T A S G A K ctt aca tcg gct ggt gct gtg ttt cta ggt ggc ggc tct ccg att gtg gtc gga gac tac gtt ggg ggc aca aac cac acg ctg ccc acc gcg tct ggc gcc aag
HCDSEM_115	Y A A E L Q Y L K tat gcg gca gag ctt cag tac ctc aaa V L E V T H Y T N R gtg cta gaa gtc acc cac tac acc aac agg I A Q L A Q Q P E V R ata gcg cag cta gcg cag cag ccc gag gtg agg V P N G P L T S Y L Q K gtg cca aac ggg ccg ctg act tcg tac ctg caa aaa L I A S G V L A A D L G G E P L N A D D R ctg atc gcc tcc ggc gtg cta gcc gca gac ctc ggg ggt gag ccg ctg aac gcg gac gac cgc
Hisl	M F A E A A S E Q R atg ttt gct gag gcg gcg tcc gag cag cgt V A V S A H D A T V S R gtt gcg gta agc gcg cat gac gcc acc gtt tca aga M L A E G L I Q I L K atg ctt gct gaa ggc ttg att cag atc ttg aaa Y A I K P V A G V G G L E L K tac gct atc aag cca gtg gct gga gtt ggc ggc ttg gag ctg aaa N A G V A A G G L L D S T A V L I A S A F N K aac gcc ggt gtt gcc gct ggc ggg ctg ctc gat agc aca gcc gtg ctg att gcg agc gcg ttt aac aag
GlyA	A V A L L E A S A P S F R gct gtg gcg ctg cta gaa gcc agc gcg ccc tcg ttc agg V L Q L A D A F P V L Y K gtt ttg cag ctg gct gac gcg ttt cct gtg ctt tac aaa L V T G G T D T H V V L L D L R ctg gtg act ggg ggc acc gac acc cac gtc gtt ctg ctc gac ctg agg N V L P F D A L P S V V A S G L R aac gtt ttg cca ttc gac gcc ttg cct tcg gtc gtg gcc tcg ggc tta agg A V A Y G V D P I T G L V D M N S V L D L A I R gct gtg gcc tac ggc gta gat ccg atc acg ggc ctc gtt gac atg aac agc gtg ctg gat ttg gcc ata cgc
CysK	L E S V N P L G S V K ctc gag tcc gtc aac ccg ttg ggg tct gta aaa T V L V I L P S L A E R aca gtt tta gta ata ttg ccg tcg cta gcc gag cgc G A L A S I A S A V G S T P V L R gga gcg ctc gct tcg ata gct agc gcc gtt ggc agc acg cca gtg cta agg G L S C I V V V P E G A S A E R ggg ctc agc tgc atc gtg gtg gta ccg gag ggc gcg tca gcc gag agg I E G S A L A N Q F E S P A N S K atc gaa ggc tca gct tta gct aat cag ttt gaa agc cca gcc aac agc aaa V D Y L V A G V G T G G T I T G V G E A L K gta gac tac ctg gta gct ggc gtg ggc aca ggc ggc acg ata acg gga gta ggc gag gca cta aag

CysI	V G V V C G V L C A R gtg ggc gtg gtg tgt ggc gtg ctg tgt gcg cgc V L G L F H D V G V R gtg cta ggc ctg ttt cac gac gtt ggc gtg agg A P P G D V T A G D V E A L A T A A Q R gcg ccg ccg ggc gac gtg acg gct ggc gac gta gaa gcg ctg gcg acg gca gcg cag cgc
HisB	F A S A A V P M D E A L A R ttt gct agc gcg gct gtg ccc atg gac gag gcg tta gcg cgc F E A G A A P A V E L A L V M L D A L A R ttt gaa gct ggc gca gcg cca gcc gtt gag ctg gcg ctt gta atg tta gac gct ttg gct agg
HCDSEM_125	S G A V S L A T A P V V V A G G R tct gga gct gtg tcg ttg gcc acg gcc ccc gtg gtg gtt gcc ggc ggc cgc S F A T A E A F D Q H V V V L A S K agc ttt gct acg gcg gaa gca ttc gac cag cac gtg gtg gtg ctg gct tct aag
HCDSEM_044	L V N A L L D A L S R ctg gtt aac gcg ctg ctg gac gcg cta tcg cgt A F V C G S P V W G R gcg ttt gta tgt ggc tcg ccc gtt tgg ggg cga F D V V A E A S A F N A L K ttt gat gta gtt gct gaa gcc agc gcg ttt aac gcg ctc aag L I W P S A V L Q A E V W A G A R ctg atc tgg ccg tca gcc gtg ctg caa gcc gag gaa gtt tga gct ggc gcg cgc
Meth	F L S L L A A E P D L A K ttt tta agc ttg ctg gcg gct gag ccg gat ttg gcc aag G V T T P L L V G G A T T S K ggc gtc acg acg ccg ctg ctg gtg ggg gga gcc aca acc agc aag S V T P E E V I G A F A S A G V P R agc gta aca ccg gaa gaa gtg att ggc gcg ttt gct tcc gcc ggc gtg ccc cgg
HisA	V S C L I W T D I N R gtc agc tgt cta atc tga act gat att aac aga D G T L Q G V N F D A L D R gat ggc acg ttg caa ggt gtt aat ttt gac gcg ctt gac cgc
TufA	E L L A A Y G Y L P D L T P I V R gag ctg ctg gcg gcc tac ggc tac ttg ccg gac ctc acg cct atc gtt agg V D Q V D D D E L V E L V E L E L R gta gat cag gtg gac gat gac gag ctg gtt gag ctg gtg gag ctg gag ctt aga
HisH	V A V V D Y G V G N L K gta gca gtt gtt gac tac ggg gtt ggc aac ttg aag V V L P G V G S F G G C W R gtt gtg ctg cct ggt gtg ggc agc ttt ggc ggc tgt tgg cgc