Figure S6a

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                  :. .             .   :*         :*:
PerHP1A     EEYAVEKILDRRVRK-GKVEYYLKWKGYAETENTWEPENNL--DCQDLIQQYELSRK    54
PseHP1A     EEYAVEKILDRRVRK-GKVEYYLKWKGYAETENTWEPENNL--DCQDLIQQYELSRK    54
VirHP1A     EEYAVEKILDRRVRK-GKVEYYLKWKGYAETENTWEPEGNL--DCQDLIQQYELSRK    54
MojHP1A     EEYAVEKILDRRVRK-GKVEYYLKWKGYPETENTWEPEGNL--DCQDLIQQYELSRK    54
MelHP1A     EEYAVEKIIDRRVRK-GKVEYYLKWKGYPETENTWEPENNL--DCQDLIQQYEASRK    54
YakHP1A     EEYAVEKIIDRRVRK-GKVEYYLKWKGYPETENTWEPENNL--DCQDLIQQYEASRK    54
SecHP1A     EEYAVEKIIDRRVRK-GKVEYYLKWKGYPETENTWEPENNL--DCQDLIQQYEASRK    54
SimHP1A     EEYAVEKIIDRRVRK-GKVEYYLKWKGYPETENTWEPENNL--DCQDLIQQYEASRK    54
EreHP1A     EEYAVEKIIDRRVRK-GKVEYYLKWKGYSETENTWEPENNL--DCQDLIQQYEASRK    54
GriHP1A     ENYAVEKIIDRRVRK-GKVEYYLKWKGYAETENTWEPESNL--DCQDLIRQYELDRK    54
AnaHP1A     EEYAVEKILDRRVRK-GKVEYFLKWKGYADTENTWEPESNL--DCQDLIQLYELSRK    54
WilHP1A     EEYAVEKILDRRVRK-GKVEYYLKWKGYSDSENTWEPEANL--DCQDLIQLYEMSRK    54
WilHP1G     KEYTVEKVLDCRLQN-DKVEYLLKWKDYPENESTWEPEENL--NCQELIQEYKLSCI    54
WilHP1H     QEFVIEKILDQRLRN-DKVEYYIKWKDHCESKNSWKELDPL--VFANVIEQFQVKRN    54
PerHP1Kcd   AVFEVEMIIDQRRRG-GRTEFLLKWKHYSEEFNSWEPRSHL--MCPKLEEEEDEDVG    54
PseHP1Kcd   AVFEVEMIIDQRRRG-GRTEFLLKWKHYSEEFNSWEPRSHL--MCPKLVKEYFKKPR    54
WilHP1Kcd   PIHEVEAVVSHRVVN-GRTEYFLKWKGFPESANSWEPRSHI--LCSELLREYSRKPR    54
EreHP1B     AEFSVERVEDKRTVN-GRTEYYLKWKGYPRSENTWEPVENL--DCPDLIANFEESLK    54
MelHP1B     AEFSVERVEDKRTVN-GRTEYYLKWKGYPRSENTWEPVENL--DCPDLIANFEESLK    54
AnaHP1B     AEFSVERVEDKRTVN-GRTEYYLKWKGYPRSENTWEPVENL--DCPDLIANFEESLK    54
SimHP1B     AEFSVERVEDKRTVN-GRTEYYLKWKGYPRSENTWEPVENL--DCPDLIANFEESLK    54
            1.......10........20........30........40........50.......
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Figure S6b

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                                                  :                   :
SimHP1Lcsd    TAISRERKAEKILHVFTTENGTTMFLIKFKDSPLVEQVPAIEANVRFSQMVIDFYEDHLSF    61
SecHP1Lcsd    TAISRERKAEKILHVFTTENGTTMFLIKFKDSPLVEQVPAIEANVRISQMVIDFYMDRLSF    61
MelHP1Lcsd    TPFVRGRMVEKIVYVFTTANKNTMFLIKFKDSPVVEVVPGIEANRRIPQMVIEFYMDHLSL    61
YakHP1Lcsd    NGFSRGLQAEKILSAFTDANGTTMFNIKFKDSPVVEQLPASDANRRIPHMVIEFYWDHLSL    61
EreHP1Lcsd    TGFPRGLQAEKILSVFTNANGTRMFNIKFKDSPKVEQLAACEANKRIPHMVIEFYWDHLSL    61
SimHP1E       SPFNHGFTAEEILKGSKNNGEISFL-IRFCHLDQPQVVPSGIAYVEIPQMVLKFYENHCDF    60
SecHP1E       SPFNHGFTAQEILKGSKNNGEISFL-IRFCHLDQPQVVPSGIAYVEIPQMVLKFYENHCDF    60
MelHP1E       SPFNHGFTAQEILKGAKNNGEISFL-IRFWHLDQPQVVPSGIAYVEIPQMVLKFYENHCNF    60
YakHP1E       SPFNHGFTAQEILKGFTNNGEISFL-IRFRHLDEPQVVPSEMAYVEIPQMVLKFYENHCSF    60
EreHP1E       SPFKHGFTAQEILKGSKNNGRTSFL-IRFWHLDQPQMVPSEIAYVEIPQMVLKFYESQCNF    60
AnaHP1E       NPFNFDFEAQRIIRGFNINGEISLL-IKFKDMDEPQIVPAEIAYAEIPQMVLRFYEKHVDF    60
MojHP1E       NAFDYGHIAEKILYAINSNGKISLL-IQFKDLDQPELIASDMAYSHIPMMVIKFYEEHLKL    60
VirHP1E       NAFEYGHKAEKILCASNNRGKISFL-IKFRDLDQPEQVESEVAYNHIPLLVIQFYEEHLKI    60
SecSkadu      DAFQRGYRVESILDMVQNTHKEQFLYIKFTRLIEPELVPLELALQHVPHLLSDFYKEYVQA    61
SimSkadu      DAFQRGYQVESILDMVQNTHKEQFLYIKFTRLIEPELVPLELALQHVPHLLSDFYKEYVQA    61
MelSkadu      DAFERGYQVESILDMVQNIHKEQFLYIKFTNLIEPELVPLELALQHVPHLLSDFYKEYVQA    61
Yakskadu      DAFQRGYEVELILDMVQNTHKEQFLYIKFMNLNEPELVPLEAALQRVPHLLSDFYQEYVQA    61
EreSkadu      DAFQRGYQVESILDMVQNTHKEQFLYIKFMNLNEPELVPLELALQLVPHLLSDFYQEYVQA    61
AnaSkadu      NSLGGGLKVETILDMVQNTSHDSFLLIKFKNKDEPELIPLDLALQKVPYLLSKFYKEYVCM    61
WilHP1Lcsd    KDVKSETKTEVDMGLQTKSERNLKVLVKFKDQKNPEFVSTTLANEQITQMIIKFYEEHVCF    61
WilGK10195    NGFDRGLEVEKIMSVHDGIDGKRIYVTKFRGAEELQHIPSAVASAKMPQIVINFYLERIQM    61
WilHP1G       NGFDRGLEVENILGIYFDQSKQRKLIIKFKGVTKPEIISSELANQKIPRMVIEFYAKRLT-    60
AnaHP1Lcsd    SWFESGLEPEEIQGAVK-QDGVLMIILKFKGQEEPVLIPATEVNQRIPQMVIKFYEERLYM    60
              1.......10........20........30........40........50........60.
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