

* 820 * 840 * 860 * 880
 Walker A Q loop
 pbMRP : KPVK^YFEN-NYNQSKN^ML^KN^LN^LTL^RNN^LIA^II^IED^IGS^GET^TFF^SSI^LCK^FLLN^NNY^IIK^NI^Y-D^MP^LLYA^PCIN^TL : 758
 pyMRP : KPVK^YFEN-NYNQSKN^IL^KN^LN^LTL^RNN^LIA^II^IED^IGS^GET^TFF^SSI^LCK^FLLN^NNY^IIK^NI^Y-D^MP^LLYA^PCIN^TL : 791
 pkMRP : -----TDALL^KN^LN^LTL^RNN^LLV^ILV^ILV^ILV^IGV^GSG^TTFF^SSL^FKL^LKL^SQNC^NYI^KIK^NVH-D^MP^LMYV^PCFY^VYV : 795
 pvMRP2 : -----GQPLVPAAL^LK^NN^LTL^RNN^LLV^ILV^ILV^ILV^IGV^GSG^TTFF^SSL^FQL^RLS^RSC^SW^KVS-AN-L^TP^LMYV^PCFY^VYV : 781
 pfMRP2 : INK^NK^YYFSSK^NND^DY^IL^KN^LN^LTL^RNN^LSV^VVI^LLV^ILV^IGV^GSG^TTFF^SY^SL^LQ^FIL^SCS^FY^LK^NI^YI^YK^YI^LY^VPC^FN^I : 837
 LKNvN TLkNnT I G GSGkTlFFnS lG kL G Y Knf dmPv Y PQ W
 * 900 * 920 * 940 * 960
 ABC motif
 pbMRP : SDGTIRSMITFEN^RED^IYY^IYLA^IIS^LSEL^IDIYS^FFN^LDM^RY^NDEH^SLSK^GQK^SRI^SLARS^LY^HHY^IN^KQ^RTE^IIE : 838
 pyMRP : SDGTIRSMITFEN^RED^IYY^IYLA^IIS^LSEL^IDIYS^FFN^LDM^RY^NDEH^SLSK^GQK^SRI^SLARS^LY^HHY^IN^KQ^RCTEN^IE : 871
 pkMRP : TIGTIRSMITFG^RED^IYLY^IYRA^IV^SSEL^IDMNT^FFR^KKDL^RY^NDEH^SLSK^GQK^RAR^ICLARALY^HHY^IH^SDL^IDE^K : 875
 pvMRP2 : TIGTIRSMITFG^RED^IYLY^IYRA^IV^SSEL^IDMNT^FFR^KKDL^RY^NDEH^SLSK^GQK^RAR^ICLARALY^HHY^IH^SDL^IVD^ER : 861
 pfMRP2 : SDGTIRSMITFG^RKY^DES^IYY^IDV^IV^KSEL^FDIIS^FFR^KKDM^RY^IS^LDEH^SLSK^GQK^RAR^ICLARALY^HHY^IH^SKHM^NLY^QK : 917
 GTIRSMI F N fDp YY aI qSEL nD FK D RYv DEHSLSKGQK RI LAR LY HYI M l y
 * 1140 * 1160 * 1180 * 1200
 Walker B D loop
 pbMRP : MSYLYL^LDDIFTSLDPY^IIS^RIFYN^LFC^DKEK^LKI^RNEH^GI^IINE^AFS^FIMK^DI^E-N^LQY^NDD^IY^LKLE^NGS^LDF : 1029
 pyMRP : MSYLYL^LDDIFTSLDPY^IIS^RIFYN^LFC^DKDK^LKN^IRNEH^GI^IINE^AFS^FIMK^DI^E-N^LQY^NDD^IY^LKLE^NGS^LYF : 1069
 pkMRP : MSYLYL^LDDIFCALDPC^IISK^IIFYN^LFC^SND^DVEGF^RFNCAF^LTAN^QI^VNS^FLED^EY^R-Q^LOY^GVE^IY^LRD^RTVY : 1110
 pvMRP2 : VSYLYL^LDDIFCALDPC^IISK^IIFYN^LFC^SR^NVEGF^RFNCAF^LTAN^QI^VNS^FLED^EY^R-D^LOY^DVC^IY^LKL^RSVY : 1100
 pfMRP2 : ISYLYL^LDDIFTSLDPY^IISK^IIFYN^LFC^DKEK^IIQH^RFNK^SIL^SES^EIL^SIL^SISS^NCLNN^NQY^DVL^IY^LKLE^NSTHY : 1093
 SYLYLDD F LDP IS nIFYNLCF K c v t n n nSF dii OY V IY Len L

Walker A

pbMRP : ILITPSQFPISKYGLERKVVVSYKKKVYDKLKNIIYANEKSCLNINFYALKSONIGIIGSGAGKSTIVMAILGLI : 1722
pyMRP : ALVSPTQLPQSKYGLERKVVVSYKKKVYDKLKNIIYANEKSCLNINFYALKSONIGIIGSGAGKSTIVMAILGLI : 1757
pkMRP : PPMCAPENGAKYGLERKVVVSYKKKIFDRSRNLYYANEKSCLNINFYALKGCKRIGIVGSGAGKSTIILSVLGLI : 1792
pvMRP2 : SPSKDVPCGAKYGLERKVVVSYKKKIFDKSRNLYYANEKSCLNINFYALKGCKRIGIVGSGAGKSTIILSVLGLI : 1795
pfMRP2 : YTSPHIDINIKYGLICERFVVSYYKKKICVDRKNKYYVANEKSCLNINFYALKGCKRIGIVGSGAGKSTIILSVLGLI : 1886

k KYGI F nV VSYKKK iD N YyYaNEKSCLrN N YALK Q IGI GkSGAGKST LGLI

Q loop

pbMRP : STSKCEIRKIDGRDIRSIPLNKKKKIGILPQSSSFVSHWNIRTIIDPYKQSSDNHIAFAETIGINLTCADLNKYIYKT : 1802
pyMRP : STSKCEIRKIDGIDINIPLDKKKKIGILPQSSSFVSHWNIRTIIDPYKQSSDNHIAFAETIGINLTCADLNKYIYKT : 1837
pkMRP : PTTTGTISTEGRDITMTLEPRKNTIGLLPQSSSFVSHWNIRTIIDPYKQSSDNHIAFAETIGINLQMEDLYKYIYKQ : 1872
pvMRP2 : PTTTGTISTEGRDITMTSLQKKRIIGLLPQSSSFVSHWNIRTIIDPYGSSDDDDHIAFAKLIGINLRKEDLYKYIYKQ : 1875
pfMRP2 : GTTTRGITITEGQDITLTLDPRKNIIGVLPQSSSFVSHWNIRTIIDPYKQSSDDHIAFAKLIGINLSYDLDLYKYIYKQ : 1966

T G I I G DiK L E K IG LPQSSSFVHWNIRTyIDPY F D eI dAF IGINL DL KYIYK k

ABC motif **Walker B**

pbMRP : FKKMN-----EYDKSKYTKINKKYNENYILMSDSIRYLSLVRIYLNPNKYKLLIDEIPVVNFF-KNNSEFINF : 1870
pyMRP : FKKMN-----EYHKSXYTKINKKNNENYILMSDSIRYLSLVRIYLNPNKYKLLIDEIPVVNFF-KNNSEFINF : 1906
pkMRP : FAS----QDGRRVYNGRDKFDKSSSSTVANSLSLSDCIRYALVRIYFLNPNKYKLLIDEIPVLDLNL-LSNNTNIN : 1947
pvMRP2 : FKSASRDDRAGGLPNGADKGQKGNSSSSAANFLAVSDCIRYALVRIYFLNPNKYKLLIDEIPVLDLNL-LSNNTNIN : 1954
pfMRP2 : RQQQ-----KKKNKNTNHLWKKKSFIDLTNLSLSDCIRYLSLVRIYFLNPNKYKLLIDEIPVLDLNC-YNTKKLTNF : 2038

k N Sd IRYL LVRI LNR YKL LIDEIPV N n ns nNF

H loop

pbMRP : FTKNLPEDYIIENYFKRITLIIISHDTRTLSSCDFICVSKGEIVYKCNYSQDVETQTOLANI CDAN- : 1939
pyMRP : FTKNLPEDYIIENYFKRITLIIISHDTRTLSSCDFICVSKGEIVYKCNYSQDVETQTOLANI CDAN- : 1975
pkMRP : FSSDVKSEFYIIRNYFSHITLIIAHDVSTLSCDFIYVAKGEVSYKCSYDIKTQAAALAAALCKQTE- : 2016
pvMRP2 : FSSDVKSEFYIIRNYFSHITLIIAHDAVSTLSCDFIYVAKGEVSYKCSYDIKTQAAALAAALCKQTE- : 2023
pfMRP2 : FTTDIKSDYIIIRFTQNTLIIAHDAVSTLSCDFIYVAKGEVSYKCSYDIKTQAAALAAALCKQTE- : 2108

F K F YII nVf hiTyLII HD TLS CDFI Vv KGEV YKC Y D TO LA iQ q