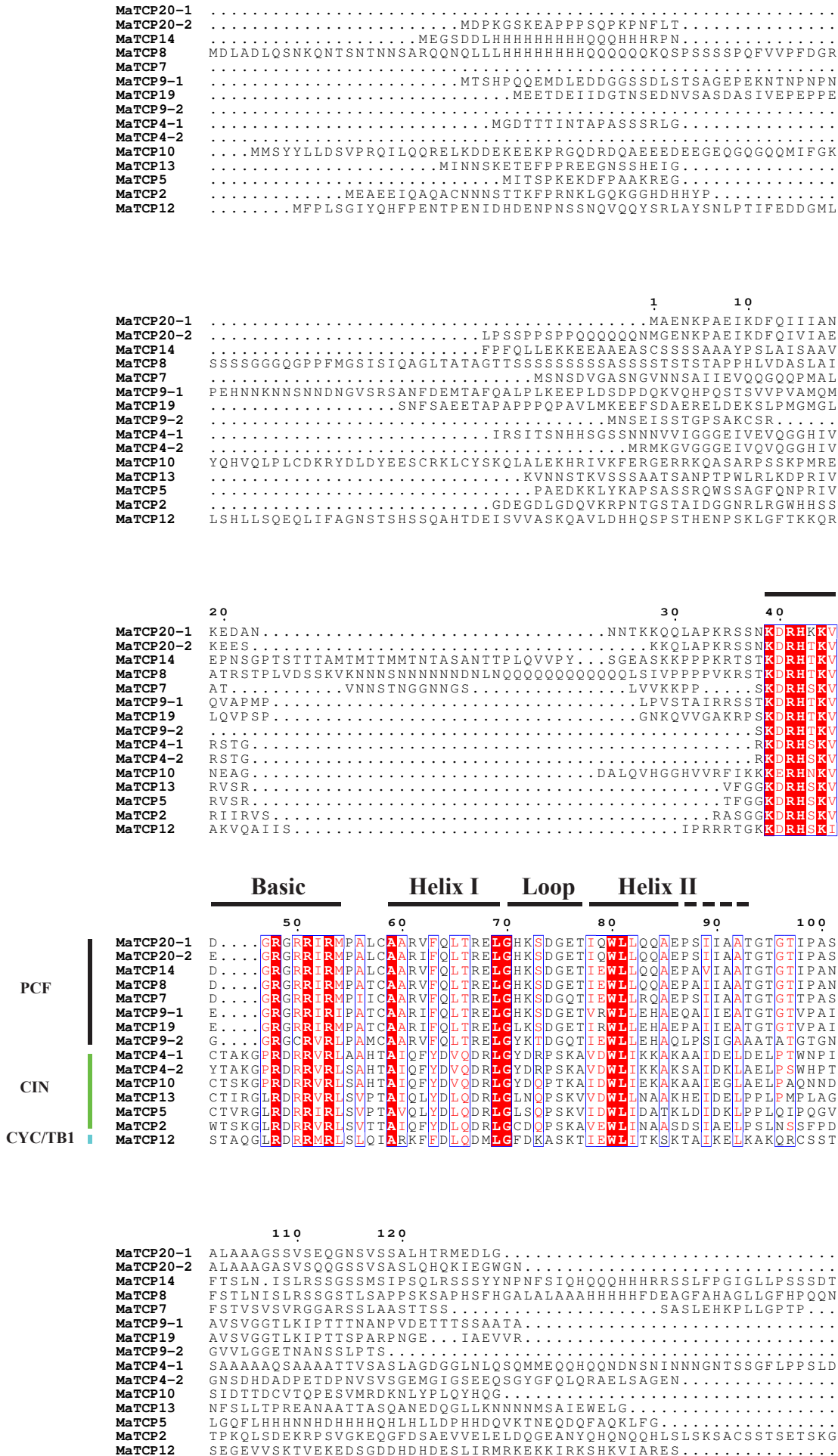


Figure S1: Multiple alignments of the amino acid sequences of the MaTCP proteins.



130
MaTCP20-1RANWAVMS.....
MaTCP20-2LGRAAAAAAAHVVGATGMWGPPQ.....
MaTCP14 NNTSTLLNFQSPLLQAKQELRDAAAATTSLELSEAAAEDFGGRKRRQPEQQ.....
MaTCP8 QQNQPTLMAEALPSGDNNNNDGGGGETTENYMRKRFRFDLFKDDNSTQSQQQGEESSEN
MaTCP7FILGKRVRPDEGGVKDGSDDGN.....
MaTCP9-1KKRRRPSNSEFVDLT.....
MaTCP19KRRRRASNSEFVDVN.....
MaTCP9-2CSERVCEKK.....
MaTCP4-1 SDAIADTIKSFFPIASEEQQHNNHNDHQSHHPRVSSSSSIQFYAPDLLSRTS.....
MaTCP4-2 TDFIADTMKSFFPTTTS.....VAANSSMNFQNYPDNL.....
MaTCP10CDNWPQKISVGSTSK.....
MaTCP13STSRQNFWTNTTTSTSTSS.....
MaTCP5VPSSYMNHQNYTDQTSFYG.....
MaTCP2 SGLSLSRSEIRVNRVKARER.....ARERAADKERENSISRIPPPPLHNNHHHHQNNIN
MaTCP12RDKARARARERTREKNLEKSR.....

140 150 160 170
MaTCP20-1GNLGRSHGIWPGIGG.....FGSGFFPNSGQPTTSFGGE.....
MaTCP20-2GLVSNSSGGYGVGIGGGF.....QSSSSSSGSMAGGSTGEEGG.....
MaTCP14DLNSSMGGYLLQSAG.....ASTVPAGHHGQIPANVMV.....
MaTCP8 KTFKQLPNKQDAAAAAAGSSAGLLRPSNLLPPTAMWAVAPSSGAGSTFWMLP.....
MaTCP7DGVSVVGG.....TAMGSMVGSAAAPAGGFWAP.....
MaTCP9-1DPVSKSSGLAPIGPAVP.....QGLVPVWAVAGNASGVNMMV.....
MaTCP19DQISVSSGLAPIAPT TYGNGAAQGLVPLWPMGPNGG.....
MaTCP9-2TGQSQDLQLSLQSFQDPILLNHHQQQAQVQAQQAHHNEHGFSSGFGWSDHHHHQN
MaTCP4-1TQDLGLSLHCFQE.....QGGADEHPPSEQAMFGSVVGFSSGYQR...
MaTCP4-2DALWKARSKEVARETANNSTTRSEVEKEEGNHEGSSNNLTQRTTN.....
MaTCP10HGIALPQGYFDGISGHNNLVMSTTNSSTTSFNSGSIQSVS.....
MaTCP13SISQSPSFTTELLTGGISNVNTNSNNNDSSPTTASDQPNLFHKGSTAMATATATATAMH
MaTCP5QSTTPTTSSSPEAANNSTNTSVDLGKLRPNSSSLKMGASRFDQEFF...
MaTCP2
MaTCP12

180 190 200
MaTCP20-1NTNMLLPKFQFGHGFDFPPG.....MNLG....AVSFNTIVIGG
MaTCP20-2GSSNYLQKIGFSGFDLPVTN.....MGMGGPSPHMSFTSILGG
MaTCP14ANSNSQVMSGDPIWTFPSVNNSGLYRGTMSSGLHFMNFPFPFAL
MaTCP8VTAGTGVSPVAPATSEQPHMWTFTPTPPSHGSTLQAPLHFMREFNLPGGIDFQGGG
MaTCP7HFGQVMSFAAAAAPEMVAQPSVQHQHAATSLFVQQQAMG
MaTCP9-1PANAFWMFPPTAAAAGAGPSSQQPQIOWALSPTVTPVFENMAARPISSSFVANQPAVVG
MaTCP19AAGPFLMFPNSGAVPGVANHAQLWAIPAAAATP.PFFGVQARPISNFVS.....
MaTCP9-2DHVVKCYSFSDQPAFDLTLNFDMEFSANEIALQALTS
MaTCP4-1 PAEISRFQRI MFNNNGNNGGGGGGGGVFNSSPPLFSRGGENNNNNHHHHNNNNNQFFSF
MaTCP4-2MVAWNGHDQASDGESESRGFAFAQAPPPQ...LTAHQALLGQGSAAFPFGN
MaTCP10KFQDCPTEQNSTQGLCLSLQSSDQDLYLHSSPIDFDEQALT
MaTCP13NHPPFPGLNNIAHIPHGVSYRWEPPNYPLLSHFAGAGHGLNITSQSDQHLQS
MaTCP5QLFFCAPPSPNSTTTSTFLTSTPYPSYMSSSTTTQYHENPHDTI
MaTCP2 MDYFTTGLLGLSSTRNHHHHHSSGFAGLPMAMSMPPQPFVSVSSGGDGHATAEALPPQFSF
MaTCP12GSDQMLDYSISNHIGGVSSGANSDDFLGFPNGWDINIDESSKTESFCG

210 220 230 240
MaTCP20-1 GN.QQVPGLELGLSQD.GHIRVLNSQTLAQLQQQ...QQMGQRS SGGD G.....
MaTCP20-2 GASQQAPGLELGLSQDGGCHIGVLNTQALTQMYHQMRVHHQHHS HQQQQ.....
MaTCP14 MPSQQLGSSDGGGGGGGGGGGGSGGNNLGD SHLSMLTALNPYRQV SGGGGGV.....
MaTCP8 RGSQQLGSMMLMQQPGAAAAQPSQQLGLGVSESNLGMALALNAY SRGGLNINS DHQHSH
MaTCP7 EASAARLGNYLP.....GHLNLLASL SGG.....
MaTCP9-1 PAGVPSAVVEVPSHVAHHGGGLSTSTTSVGP TAAKKTSS TMAPSL SSSGGGGGT TKAQML
MaTCP19ALQPVLRLDSQVSSGSVNTCSMETTSNAMISTSDGVGA SSSSCSTTTSATQML
MaTCP9-2 ETQEEEEEEEDKRKE.....
MaTCP4-1 QRGPLQSSNTPSVRAWIDHTSSSSSSSPLMVMSIADHQIPHSLP GMGFIPS VGGGGFSS
MaTCP4-2 QRGTQSSSFSTPLARDWDDLPSMAVAAAAAASQRPQQQH IHHQSSS SSSSIFGTRFVSYGG
MaTCP10 SMSSLTDSTS IDTGRFQSLMAINS SAGNEGAQFFFNLSLP LLQQP FLRENQF.....
MaTCP13 LNVMSLQPSALSLSSTGSPYTTTTTQTYFPSHSTAASGVELVDSRQV NHFHMLSSNVQNLL
MaTCP5 RPQM INNH IQLMSANSSTISSTASSSSSSSQFHILNNSLMA SLH TTSVNNNNNNNPP LI
MaTCP2 VPEQLIATTSQPNSSGGDYSLNF SSSSGLAGFNRTGLQSNSSP TSLPHLQLRFASPID
MaTCP12 ITVANAKPVVIGNVRQNPCAIFTTTL SFDTKKKKPTSSFFPVIA T SNAQRENPS SIFVT

250 260
MaTCP20-1GGDSLVPVRHRSPEKDDSQSR.....
MaTCP20-2QQQQQNPNHQTS AKDSSQSGQ.....
MaTCP14SESQASGSHGGDDRHDNSNHS.....
MaTCP8 PLEHHQHQQHQQHQSQATDSGDEDPNNSQ.....
MaTCP7PGSSGRRDDDP.....
MaTCP9-1 RDFSLEIYEKRELQFMG.RPGNHQRQSSKP.....
MaTCP19 RDFSLEIYDKKELQFLGGRSSKSQTQCSKP.....
MaTCP9-2
MaTCP4-1 GFHHN.IPARIQGEEE...HDGISDKPSSASS.DSCH.....
MaTCP4-2 GLPVFRIPARIHGV EEDGGHGVVSER PSSSSSPNSAHN.....
MaTCP10
MaTCP13 PNTIRPFHFGANN SKLVGYPPNDNGSDQK.....
MaTCP5 KSFPAILHPRLLAQSSAYENRQQKDRSTTAG.....
MaTCP2 GTTNVPFFIGASPMENHHHHHHHHHHHQQFPAGFDGRLQLYYGDGGRHSDQKKGKGN
MaTCP12 SSSYRHIVEENPSSVFMATSTISHNYAAEEP.....