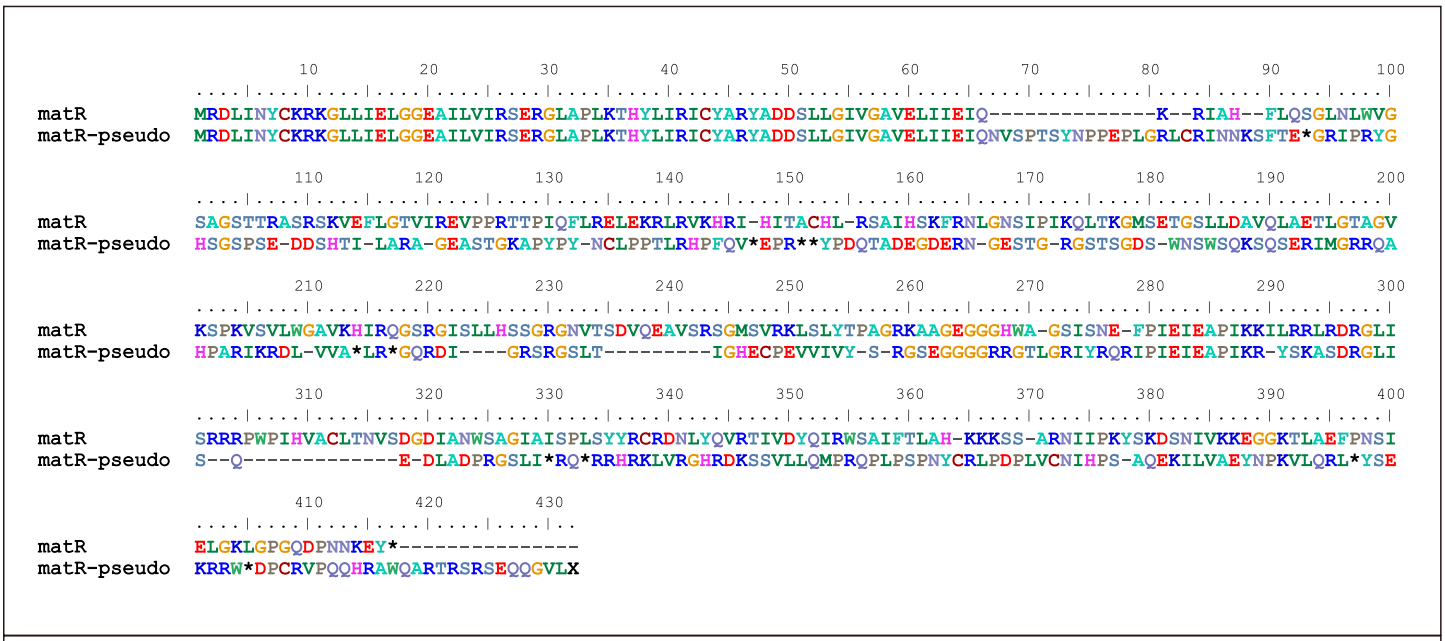
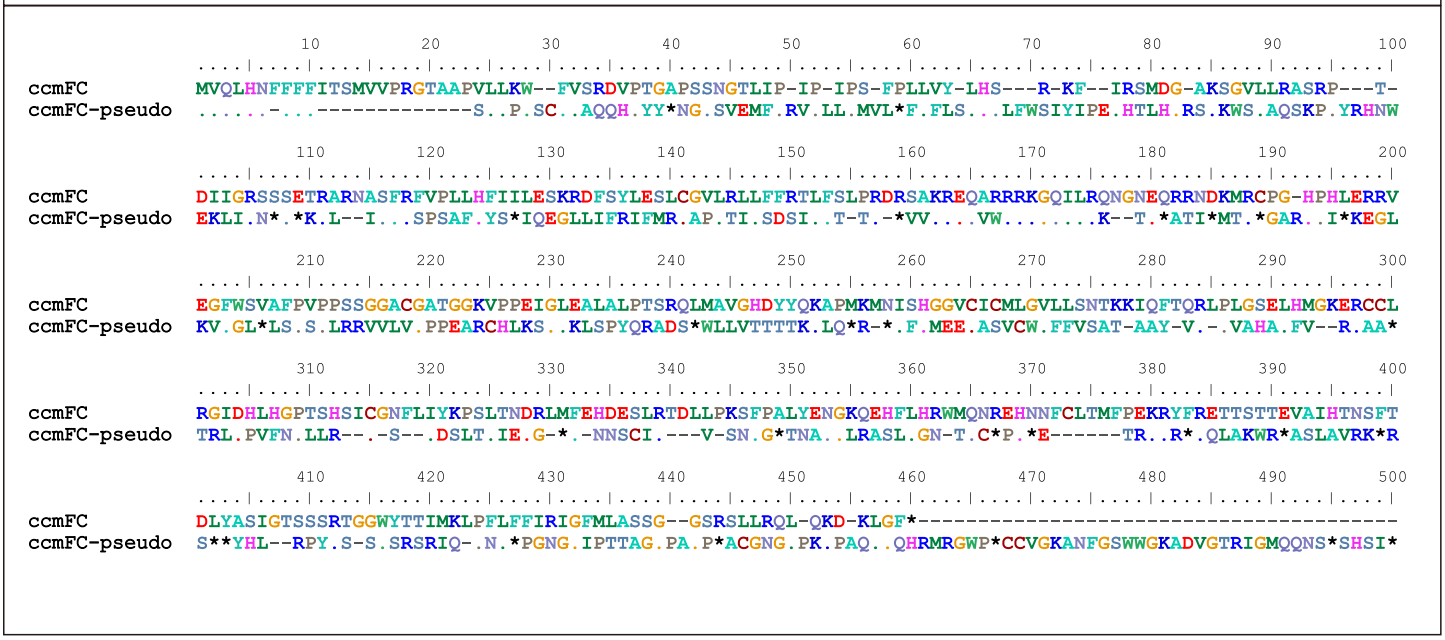

matR MRDLINYCKRKGLLIELGGEAILVIRSERGLAPLKTHYLIRICYARYADDSLLGIVGAVELIIEIQ----------K--RIAH--FLQSGLNLWVG
matR-pseudo MRDLINYCKRKGLLIELGGEAILVIRSERGLAPLKTHYLIRICYARYADDSLLGIVGAVELIIEIQNVSPTSYNPPEPLGRLCRINNKSFTE*GRIPRYG
matR SAGSTTRASRSKVEFLGTVIREVPPRTTPIQFLRELEKRLRVKHRI-HITACHL-RSAIHSKFRNLGNSIPIKQLTKGMSETGSLLDAVQLAETLGTAGV
matR-pseudo HSGSPSE-DDSHTI-LARA-GEASTGKAPYPY-NCLPPTLRHPFQV*EPR**YPDQTADEGDERN-GESTG-RGSTSGDS-WNSWSQKSQSERIMGRRQA
matR KSPKVSVLWGAVKHIRQGSRGISLLHSSGRGNVTSDVQEAVSRSGMSVRKLSLYTPAGRKAAGEGGGHWA-GSISNE-FPIEIEAPIKKILRRLRDRGLI
matR-pseudo HPARIKRDL-VVA*LR*GQRDI----GRSRGSLT---------IGHECPEVVIVY-S-RGSEGGGGRRGTLGRIYRQRIPIEIEAPIKR-YSKASDRGLI
matR SRRRPWPIHVACLTNVSDGDIANWSAGIAISPLSYYRCRDNLYQVRTIVDYQIRWSAIFTLAH-KKKSS-ARNIIPKYSKDSNIVKKEGGKTLAEFPNSI
matR-pseudo S--Q----------E-DLADPRGSLI*RQ*RRHRKLVRGHRDKSSVLLQMPRQPLPSPNYCRLPDPLVCNIHPS-AQEKILVAEYNPKVLQRL*YSE
matR ELGKLGPGQDPNNKEY*----------
matR-pseudo KRRW*DPCRVPQQHRAWQARTRSRSEQQGVLX


ccmFC MVQLHNFFFFITSMVVPRGTAAPVLLKW--FVSRDVPTGAPSSNGTLIP-IP-IPS-FPLLVY-LHS---R-KF--IRSMDG-AKSGVLLRASRP---T-
ccmFC-pseudo ......-...----------S..P.SC..AQQH.YY*NG.SVEMF.RV.LL.MVL*F.FLS...LFWSIYIPE.HTLH.RS.KWS.AQSKP.YRHNW
ccmFC DIIGRSSSETRARNASFRFVPLLHFIILESKRDFSYLESLCGVLRLLFFRTLFSLPRDRSAKREQARRRKGQILRQNGNEQRRNDKMRCPG-HPHLERRV
ccmFC-pseudo EKLI.N*.*K.L--I...SPSAF.YS*IQEGLLIFRIFMR.AP.TI.SDSI..T-T.-*VV....VW........K--T.*ATI*MT.*GAR..I*KEGL
ccmFC EGFWSVAFPVPPSSGGACGATGGKVPPEIGLEALALPTSRQLMAVGHDYYQKAPMKMNISHGGVCICMLGVLLSNTKKIQFTQRLPLGSELHMGKERCCL
ccmFC-pseudo KV.GL*LS.S.LRRVVLV.PPEARCHLKS..KLSPYQRADS*WLLVTTTTK.LQ*R-*.F.MEE.ASVCW.FFVSAT-AAY-V.-.VAHA.FV--R.AA*
ccmFC RGIDHLHGPTSHSICGNFLIYKPSLTNDRLMFEHDESLRTDLLPKSFPALYENGKQEHFLHRWMQNREHNNFCLTMFPEKRYFRETTSTTEVAIHTNSFT
ccmFC-pseudo TRL.PVFN.LLR--.-S--.DSLT.IE.G-*.-NNSCI.---V-SN.G*TNA..LRASL.GN-T.C*P.*E------TR..R*.QLAKWR*ASLAVRK*R
ccmFC DLYASIGTSSSRTGGWYTTIMKLPFLFFIRIGFMLASSG--GSRSLLRQL-QKD-KLGF*----------
ccmFC-pseudo S**YHL--RPY.S-S.SRSRIQ-.N.*PGNG.IPTTAG.PA.P*ACGNG.PK.PAQ..QHRMRGWP*CCVGKANFGSWWGKADVGTRIGMQQNS*SHSI*