**[Colored](http://prodata.swmed.edu/promals3d/info/promals_output.html) PROMALS3D alignment (sequences in aligned order)**

Conservation: 9 675 9 7 66 5557 6 5 5 7 955 5

\_Pichia\_membranifaciens\_N 1 MANIHSFFCSFFILLLSLRS---CLGQLVIDSPSAGSTFDVVGGEVTIPVKWEDDG-----NDPTDDQIT 62

\_Ogataea\_polymorpha\_XP\_01 1 MRT-IYW---FYSLVFLWTG---VFADVEPVSPSEGDTFTVDGSTVKFNVTFKDDG-----ESPNIKDAL 58

\_Hyphopichia\_burtonii\_NRR 1 ------------------------MADVDVTSPSSGKSYKASGGSASVEIKWKDDS-ED-GDTLYLGNVE 44

\_Suhomyces\_tanzawaensis\_N 1 MQYQVLL---LLLSATFWRN---VLADVDIQKPEAGDSFSASGGDVTVSLEWKDDS-DDSEDADSLDNVS 63

\_Meyerozyma\_guilliermondi 1 MKVF------YVILTFICAF---VVADVELTAPDSGSTYTASGGSAAVTIKWKDTVEDDDDSAASLSKVL 61

\_Lodderomyces\_elongisporu 1 MQSI-------FRLAFLFTFLTRVLADVEITSPESGDSFAASGGTAAVKLEWKDS--DDSDSDLSLDNVK 61

\_Debaryomyces\_fabryi\_XP\_0 1 MQSQLIF---LLSVLIYAVA---VMGDMEFTAPKSGKTFTASGGKVSVEIKWDDD-----GSDLNFKDIE 59

\_Metschnikowia\_bicuspidat 1 MHF-LSL---WIILVSLAAR---VLGDVSITSPSTDQTYSGSSGSASVSVVWTDDS-DDD-ADASLSNVD 61

\_Clavispora\_lusitaniae\_AT 1 MQI-TVL---WTFL-SFISL---ALADVSISNPSTGQTFDGSDGTATVSVKWIDDG-ND---QVPLKDVE 58

\_\_Candida\_\_auris\_XP\_02889 1 MYL-FTL---LATFFALLGL---TVADVEITKPATGESFSASGGSAKVSIQWKDTS-DSKDDADSLSKVQ 62

[Consensus\_aa:](http://prodata.swmed.edu/promals3d/info/consensus.html) **M**.........*hh*.*hh*.*hh*.....*hh*t**D***l*p*h*ss**P**ps**G**po*@*s*h*s**GG**p*h*p*l*p*l*p**W**c**D**st.....ss.s*h*pp*l*.

[Consensus\_ss:](http://prodata.swmed.edu/promals3d/info/consensus_ss.html) h hhh hhhhhhhhhh heeeeeeee eee eeeeeeeeee hhh e

Conservation: 7 9777 5 5 5 7 5 555 759 765957 5 57 9657

\_Pichia\_membranifaciens\_N 63 SYAFKLCTGPNQPIEGLQLIKG---ITPSQVKGNSYDAVFDADNGADGSYFVQIYCSLSNGGYMIRYSDR 129

\_Ogataea\_polymorpha\_XP\_01 59 SFTLLLMTGPNDDIEQRASLASS--ITLSDLDDNTYQASVEASVGADGYYYVQIYADYGSQSYTIHYTDR 126

\_Hyphopichia\_burtonii\_NRR 45 GYTISLCYMDSGDISCPQTIVK-----DKKFDSNKYTAKIDAADVPNGYYFFQIYTTFEKDSTSIHYTDS 109

\_Suhomyces\_tanzawaensis\_N 64 GYTISLCTGSNSEIECFLQLEQ-----NQKIEGNKYSATIKASDAPSGNFFFQIYTEFA-KGWTNHYSPR 127

\_Meyerozyma\_guilliermondi 62 KYTILLCYGAEDGTGTIKCLDDDPILKAQKVSGTSYKALIDASMVPNGYYYFQVYAAYPQQGYSIHYTDR 131

\_Lodderomyces\_elongisporu 62 TYTISLCTGS---NSAIQCLDPS--IDQEKLSSKSQTINIDSTDVPNGYYYFQIYTVFTNGADTIHYSPR 126

\_Debaryomyces\_fabryi\_XP\_0 60 KYIVSLCTGPNDDIECTT-IEQ-----VTDLTKKSYTASIDASSFPNGYYYFQMYNTYD-LGISILYTDR 122

\_Metschnikowia\_bicuspidat 62 LYAIVLCTGSNSDIQSVMTLTD-----SLSSSALEYDAVIDEADVPSGVYFIQVYAKFG-SGYTIHYSNR 125

\_Clavispora\_lusitaniae\_AT 59 KYSIVLCTGPNNNIKPVKSYTT-----SLSGSETGYELSIKASDVPNGEYFVQVFAKVK-NGYTIHYTNR 122

\_\_Candida\_\_auris\_XP\_02889 63 SYAIVLCTGPNSDISAVKALEK-----KLKAGSTSYEATIDANIGPNGQYFIQVYAVYPDNGHSIYYTNR 127

[Consensus\_aa:](http://prodata.swmed.edu/promals3d/info/consensus.html) .**Y***hl*.**LCTG**ssss**I**ps...*l*.........p*h*pspp**Y**p**A**s*l***-A**sssss**G**.**Y***@h***Q***l***Y***h*.*h*s..t*h*o**I+Y**os**R**

[Consensus\_ss:](http://prodata.swmed.edu/promals3d/info/consensus_ss.html) eeeeeeee eeeeee eeeeeeeee eeeee e

Conservation: 7 9 7959 5 5 5 957966699599955

\_Pichia\_membranifaciens\_N 130 IQLSGMSGSY-KPSGSGPS------PDGETNSD------------DNGQQNDADISKSFTVPYTLQTGKT 180

\_Ogataea\_polymorpha\_XP\_01 127 FKLEGMTGTL-KTSGTGDP-----------PEA------------QQISVQQSINSAWFTIPYTKQTGKT 172

\_Hyphopichia\_burtonii\_NRR 110 FKLSGMSGPS-ASIKATSS------VAAPDPQI------------SLGEAATSINSASFSITYTKQTGRT 160

\_Suhomyces\_tanzawaensis\_N 128 FALTGMSGPK-SATITING-------APTLVSLDVSASGKEPDPQLSAGDGTSINSASFTIPYTEQTGKS 189

\_Meyerozyma\_guilliermondi 132 FQLKGMSGPS-TIKATATG-------DTPGPQVSIE---------GVDGAGGAVNSKSFSITYTLQTGKT 184

\_Lodderomyces\_elongisporu 127 FKLTGMSGATGTFTVTATG-------DPPAG--ATE---------NYDVATNTDFSKSFTVPYTLQTGKT 178

\_Debaryomyces\_fabryi\_XP\_0 123 FQLKGMTGGS-KTFGSTMSLSVALTATGDAPAA------------TTEGGDTSVNSASFSITYTKQTGKT 179

\_Metschnikowia\_bicuspidat 126 FTLTGMSGST-STYTFSASLF-SITGTHPGAQL------------NLDGETTLIDSRSFSVTYTLQTGKT 181

\_Clavispora\_lusitaniae\_AT 123 FKLTGMSGSA-GSFTFPGSLF-SVTGDKPTPQI------------DVSSSSQTINSASFTVPYTLQTGTW 178

\_\_Candida\_\_auris\_XP\_02889 128 FKLTDMKGEA-DTYTFPASYF-SISGDQPSPQP------------YAAAQPTNINSKSFSVTYTLQTGKT 183

[Consensus\_aa:](http://prodata.swmed.edu/promals3d/info/consensus.html) **F**p**L**p**GM**o**G**s..ps...sst.......s.sssp..................sps..**S**.**SF**o*l*s**YT**b**QTGKT**

[Consensus\_ss:](http://prodata.swmed.edu/promals3d/info/consensus_ss.html) eeee e eeee e

Conservation: 66999959977 6756 57675759667 755 575 69 9799795 9 9 7 57 675 655

\_Pichia\_membranifaciens\_N 181 RFAPMQMQPGSEITVSSWSRRFPSSAVTFYSSFASQPKIISTRTPGWSYTMSSFVNYATPAPFPSV-VGW 249

\_Ogataea\_polymorpha\_XP\_01 173 RYAPMQTQPGSKVTATTWSRRFPASSVTYYSTISGTPVVYSTITAGWSYTMSSLTNYATPAPFPSE-VGW 241

\_Hyphopichia\_burtonii\_NRR 161 KFAPMQMQPKTTVTHSKWSRRFASSSYTPYSTLRKSPNCRTTKTPGWSYTPKSATNTVSPAGYPTSFYAA 230

\_Suhomyces\_tanzawaensis\_N 190 KFAPMQTQPGSTITATTWSRQYPTSSVSYFSKLGGTANVRTTITPGWSYTPKSAVNAASVAPFPTY---Y 256

\_Meyerozyma\_guilliermondi 185 RYAPMQMQPGSTITHSKYSTRYPTSAVTYYSTKAKSPVVYSTITPGWSYSRKSYTNLATAQLFETSHYAA 254

\_Lodderomyces\_elongisporu 179 RFAPMQMQPGSTVTATTWTRRFPTSAVTYYTTKSKSPVVMSTITPGWSYTMSSDVNWASVAPYPTYWYPA 248

\_Debaryomyces\_fabryi\_XP\_0 180 RYAPMQTQPGSKITHTSMTRRFPTSSYSAYSTYKKSPNVMTTLTPGWDYTPASKPNGATVAPYPNT---A 246

\_Metschnikowia\_bicuspidat 182 RYAPMQTQPGSSISHSVYSTRHATSAYTPYSTIRASPNVYSTVTPGWSYAVTSTFNTAAVAEYPTYYYPA 251

\_Clavispora\_lusitaniae\_AT 179 RFAPMQLQPGTTVTHTAYSTRHPSSAYTPFTSISPSPNVYSTITPGWSYSVVSKINSAPVAPYPTYYYPA 248

\_\_Candida\_\_auris\_XP\_02889 184 KFAPMQTQPGSTVTATTYSRRHPTSAYTPYKSYSPSPNALSTITPGWDYTVVSKVNSASVAGYPTEFYPA 253

[Consensus\_aa:](http://prodata.swmed.edu/promals3d/info/consensus.html) **+***@***APMQ***h***QPGS**p*l***T***h*os*@***S**p**R***@***P**o**S**t*h*o.**Y**oo*h*..o**P**s*l*.o**T**.**TPGWSY**o..**S**.*h***N**.**A**os**A**s*@***P**o..*h*s*h*

[Consensus\_ss:](http://prodata.swmed.edu/promals3d/info/consensus_ss.html) ee eeee eeeee eeeee eee

Conservation: 6 6 5 55 5699 7

\_Pichia\_membranifaciens\_N 250 YAPSKRLQ----SASLDAPMPGASADAKRKLQKRRWVD 283

\_Ogataea\_polymorpha\_XP\_01 242 YAPSKRLQ----SATLDSS--------YRKMKKRRWDD 267

\_Hyphopichia\_burtonii\_NRR 231 SSRVSKPT----LSSAS--------------KSKRWL- 249

\_Suhomyces\_tanzawaensis\_N 257 YPASERVT----KASLSTA-----------AKKRRWLE 279

\_Meyerozyma\_guilliermondi 255 SDKVKQAT----LSAGD--------------KRKRWID 274

\_Lodderomyces\_elongisporu 249 SQRVSTAS----ITATK--------------KKRRWLD 268

\_Debaryomyces\_fabryi\_XP\_0 247 YPASERITAKASLTTAA--------------KKRRWLD 270

\_Metschnikowia\_bicuspidat 252 SSRVVSAS----LSSA---------------NKKRWL- 269

\_Clavispora\_lusitaniae\_AT 249 SSRVSQAS----LSSA---------------RRRRWLD 267

\_\_Candida\_\_auris\_XP\_02889 254 SSRVRQAT----LSAQ---------------KRRRWLE 272

[Consensus\_aa:](http://prodata.swmed.edu/promals3d/info/consensus.html) .s.spp*h*p.....ts*h*...............p**++RW***l***-**

[Consensus\_ss:](http://prodata.swmed.edu/promals3d/info/consensus_ss.html) hhhhh hhh hh