

RcTric 1 -----MEQQQQQGNGQGVVMGKENPQOLOAKMKELENGFNSHISKOSLAEVAAVVATTSATOGAALIAGTGAHPISSSLTIPPPD-MALNPOAMAS|KOAGALGGGLVQARNFAVMTGVNAG|SSVMKRIRG-KEDVQSSMVAAFGSG  
 SmTric 1 -----GSLEARAEQVRLKLDDGFIQOLOQSPQVPEVAGCAGLNGRHTAAAGA|PGNQNLQPTNPOMMUCNQFQALGGPQVQARNFAVM|GVNAG|CVMKRIRG-KEDVQSSMVAAFGSG  
 AtTric1 1 -----MVVGGGGGEDOKRSSGEMMAMASLFDNDOONPQOFOVRIKEVEVTFNFTWLSKOSIPVEAVAVTMSGVQGPIC|GVNAG|CVMKRIRG-KEDLISIUVVALIGSG  
 AtTric2 1 -----MGKDGEGEKKRKGTDGETMAVMSLMDKODQOFOVPKFKEAE|GFNSWMSKOKLVEEAVVATMGGVQGAFPIC|GVNAG|CVMKRIRG-KEDLISIUVVALIGSG  
 BrTric1 1 -----MGKDVGGGEKRRKGTDGETMAVMSLMDKODQOFOVPKFKEAE|GFNSWMSKOKLVEEAVVATMGGVQGAFPIC|GVNAG|CVMKRIRG-KEDLISIUVVALIGSG  
 BrTric2 1 -----MGVGGGEGEQRREGENMAISSLFDNDOONPQOFOVPKFKEAE|TWSKOSIPVEAVAVTMSGVQGAFPIC|GVNAG|CVMKRIRG-KEDLISIUVVALIGSG  
 BrTric3 1 -----MAIIGEERERTVSGGDTHMERSSM|EISPTKQVIEERVFTTGGVSGAVL|GIVNTGIMA|PMARRYPOAMAS|ALRRTVVA--RAYALEGSAVFNAWFGES|IMRGIRG-KUDLISRMVISASCGG  
 BrTric4 1 -----MGKDGDKVQETMAVMSLMDKODQOFPQOFQIINKEVEVGFNSHISKOKLVEEAVVATMGGVQGAFPIC|GVNAG|CVMKRIRG-KEDLISIUVVALIGSG  
 CruTric1 1 -----MGVGGGGGGDQRGGGEMMAMASLFDNDOONPQOFOVPKFKEAE|TWSKOSIPVEAVAVTMSGVQGAFPIC|GVNAG|CVMKRIRG-KEDLISIUVVALIGSG  
 CruTric2 1 -----MAPLPFAVVIPGLGVSSVEDVCKHMAMDTQDVAVVLVGLOSS|QGAGACMGTSAID|PMARRYPOAMAS|LALRRTVVA--RAYALEGSAVFNAWFGES|IMRGIRG-KUDLISRMVISASCGG  
 CreTric 1 -----MEQGKQGVVVKLFP--HONPWEQICAFKKELENGFRTWAKOSLPVEAVAVTITVSAAQGAAIGFNGTITNDVSSSLTTP--Q-AGLNPQAMAS|KOAGALGGGLVQARNFAVMTGVNAG|SVMKRIRG-KEDVQSSMVAAFGSG  
 EgTric1 1 -----MEREQGVMTVSKLAP--QONPJEQIQARKEVEVGFNAWMSHQLPLVEAVVTTATSGQGAAICAFNGTITDGVVAAATPS|CVMKRIRG-KEDLISIUVVALIGSG  
 EgTric2 1 -----MEQGKQGVVVKLFP--PNPQEIQOSRSFKIE|GFNDWIKSOSLPLVEAVVTTATSGQGAAICAFNGTITDGVVAAATPS|CVMKRIRG-KEDLISIUVVALIGSG  
 EgTric3 1 -----MEQAGQCLIMVMS--QSONPJEQIQARKEVEVGFNAWMSHQLPLVEAVVTTATSGQGAAICAFNGTITDGVVAAATPS|CVMKRIRG-KEDLISIUVVALIGSG  
 GmTric1 1 -----MEQAGQCLIMVMS--QSONPJEQIQARKEVEVGFNAWMSHQLPLVEAVVTTATSGQGAAICAFNGTITDGVVAAATPS|CVMKRIRG-KEDLISIUVVALIGSG  
 GmTric2 1 -----MEQAGQCLIMVMS--QSONPJEQIQARKEVEVGFNAWMSHQLPLVEAVVTTATSGQGAAICAFNGTITDGVVAAATPS|CVMKRIRG-KEDLISIUVVALIGSG  
 ZmTric1 1 MADGHGRENSAVALKTP-SVPMARGLRCGSNLEBNSGRVIALE|PFRAMAPINPEAVAVTANGVQGAFPIC|GVNAG|CVMKRIRG-KEDLISIUVVALIGSG  
 ZmTric2 1 MEKAGQKRRPLTVMASSSSQOAVAHGMQNPMLAEWDTRVKSLE|PQVRAWAKOPTHVEAVAVTANGVQGAFPIC|GVNAG|CVMKRIRG-KEDLISIUVVALIGSG  
 ZmTric3 1 MADGKRGEDSAVALKTPSSAVAHGGLRGSVSLPEENSGRVL41IE|PQVRAWAKOPTHVEAVAVTANGVQGAFPIC|GVNAG|CVMKRIRG-KEDLISIUVVALIGSG  
 VvTric1 1 -----MDEGKQGVVMAAQN|PQOLOQARIKOLENGFRAWAKOSLPVEAVAVTITVSAAQGAAICAFNGTITNDVSSSLTTP--Q-AHLNPOAMAS|KOAGALGGGLVQARNFAVMTGVNAG|SVMKRIRG-KEDVQSSMVAAFGSG  
 VvTric2 1 -----MDEGKQGVVMAAQN|PQOLOQARIKOLENGFRAWAKOSLPVEAVAVTITVSAAQGAAICAFNGTITNDVSSSLTTP--Q-AHLNPOAMAS|KOAGALGGGLVQARNFAVMTGVNAG|SVMKRIRG-KEDVQSSMVAAFGSG  
 OsTric1 1 -----MEQMGQQKRRPLVVMAS---AQAAARGGANPAAELTDVRVKTLEMGFLRANIAKOPTHVEAVAVTITVGAVOGQALGGLGNTFAPHGGSPPFWVOPPP--PGADPNALIASFQALAGGPLVQARNFAVMTG|NAG|SCVMKRIRG-KEDVQSSMVAAFGSG  
 MtTric 1 -----MEQGKQGAMVLKGLPOOLNP|DQOTRIXKHLFLWMSKOSLPLVEAVVTTATSGQGAAICAFNGTITDGVVAAATPS|CVMKRIRG-KEDVQSSMVAAFGSG  
 StTric 1 -----MGEQGKQGAMVHEMPMNSSNONPQOLOQNAK-KELE|GFNGWMSKOSLPLVEAVVTTATSGQGAAICAFNGTITDGVVAAATPS|CVMKRIRG-KEDVQSSMVAAFGSG  
 PpTric1 1 -----MOLKVKOLDODVWVKKPVLKLDLSDVWVKKPQAPEEVVLTAGSAVOGQAAICALNGTISADVSTMETPS--POLNPHEAJAS|LOOAKRS  
 PpTric2 1 -----MEQQGKQGVTVALKLFP--NQDPKJLNUKELEDGFNSWMSKOSLPLVEAVVTTATSGQGAAICAFNGTITDGVVAAATPS|CVMKRIRG-KEDVQSSMVAAFGSG  
 PtTric2 1 -----MEQQGKQGVVKSCLP--NQDPKJQFKYKELEDGFNSWMSKOSLPLVEAVVTTATSGQGAAICAFNGTITDGVVAAATPS|CVMKRIRG-KEDVQSSMVAAFGSG  
 VcTric 1 -----MALPFAVVLPGLGEVKSDELGKKYQDMLAGQDVAVQVLLTGLOSAVOGQVILCYMIGSISSTP-----PNQ-GAAKFSNPALESVVVKMGPNGSARNIATLTKRNGKEDVMSIANGAFSISG

RcTric 145 NIFSLVSGVCGPNPAANAIISCLFFAIIQGGLFOLGQKFSPQPFEDPFTVNRTRVHHSGLQNEYKFKKKGLTDSTPLLTDS--ALRDVRIPPGPRLLILDH|Q-RDPELTERERIHG-  
 SmTric 132 NELSLASGMCQPVASAAVTCISFCGLQAFVTRQFQPCDFDPLRSLKIRLVEGLKREKNNFKKGHTD|TPLLTDS--ALRDVRIPPGPRLLILDH|Q-RDPELTERERIHG-  
 AtTric1 149 FAFSLVSGMCPQAAVTCISFCGLQAFVTRQFQPCDFDPLRSLKIRLVEGLKREKNNFKKGHTD|TPLLTDS--ALRDVRIPPGPRLLILDH|Q-RDPELTERERIHG-  
 AtTric2 144 VAFSLVSGMCPQAAVTCISFCGLQAFVTRQFQPCDFDPLRSLKIRLVEGLKREKNNFKKGHTD|TPLLTDS--ALRDVRIPPGPRLLILDH|Q-RDPELTERERIHG-  
 BrTric1 148 VAFSLVSGMCPQAAVTCISFCGLQAFVTRQFQPCDFDPLRSLKIRLVEGLKREKNNFKKGHTD|TPLLTDS--ALRDVRIPPGPRLLILDH|Q-RDPELTERERIHG-  
 BrTric2 144 FAVSLVSGMCPQAAVTCISFCGLQAFVTRQFQPCDFDPLRSLKIRLVEGLKREKNNFKKGHTD|TPLLTDS--ALRDVRIPPGPRLLILDH|Q-RDPELTERERIHG-  
 BrTric3 121 LAYSLAV-KEL-TGQPABALITTSAYAALSGC---TTATSIKSRNAQDFP|TIEUKA|LISLQGEEPEKXKFKKKGLTD|TPLLTDS--ALRDVRIPPGPRLLILDH|Q-RDPELTERERIHG-  
 BrTric4 21 LAISLVS-EGLKVRPAHALTAVVSVGTLIYKWSSETIKSHNAQDFP|TIEUVVMLSLLQGEEPEKXKFKKKGLTD|TPLLTDS--ALRDVRIPPGPRLLILDH|Q-RDPELTERERIHG-  
 CruTric1 143 VAFSLVSGMCPQAAVTCISFCGLQAFVTRQFQPCDFDPLRSLKIRLVEGLKREKNNFKKGHTD|TPLLTDS--ALRDVRIPPGPRLLILDH|Q-RDPELTERERIHG-  
 CruTric2 150 FAVSLVSGMCPQAAVTCISFCGLQAFVTRQFQPCDFDPLRSLKIRLVEGLKREKNNFKKGHTD|TPLLTDS--ALRDVRIPPGPRLLILDH|Q-RDPELTERERIHG-  
 CreTric 130 VAFSLVSGMCPQAAVTCISFCGLQAFVTRQFQPCDFDPLRSLKIRLVEGLKREKNNFKKGHTD|TPLLTDS--ALRDVRIPPGPRLLILDH|Q-RDPELTERERIHG-  
 CsTric 142 NIFSLVSGMCPQAAVTCISFCGLQAFVTRQFQPCDFDPLRSLKIRLVEGLKREKNNFKKGHTD|TPLLTDS--ALRDVRIPPGPRLLILDH|Q-RDPELTERERIHG-  
 EgTric1 145 AIFSLVSGMCPQAAVTCISFCGLQAFVTRQFQPCDFDPLRSLKIRLVEGLKREKNNFKKGHTD|TPLLTDS--ALRDVRIPPGPRLLILDH|Q-RDPELTERERIHG-  
 EgTric2 144 AIFSLVSGMCPQAAVTCISFCGLQAFVTRQFQPCDFDPLRSLKIRLVEGLKREKNNFKKGHTD|TPLLTDS--ALRDVRIPPGPRLLILDH|Q-RDPELTERERIHG-  
 EgTric3 9 AIFSLVSGMCPQAAVTCISFCGLQAFVTRQFQPCDFDPLRSLKIRLVEGLKREKNNFKKGHTD|TPLLTDS--ALRDVRIPPGPRLLILDH|Q-RDPELTERERIHG-  
 GmTric1 144 AIFSLVSGMCPQAAVTCISFCGLQAFVTRQFQPCDFDPLRSLKIRLVEGLKREKNNFKKGHTD|TPLLTDS--ALRDVRIPPGPRLLILDH|Q-RDPELTERERIHG-  
 GmTric2 144 AIFSLVSGMCPQAAVTCISFCGLQAFVTRQFQPCDFDPLRSLKIRLVEGLKREKNNFKKGHTD|TPLLTDS--ALRDVRIPPGPRLLILDH|Q-RDPELTERERIHG-  
 ZmTric1 158 AIFSLVSGMCPQAAVTCISFCGLQAFVTRQFQPCDFDPLRSLKIRLVEGLKREKNNFKKGHTD|TPLLTDS--ALRDVRIPPGPRLLILDH|Q-RDPELTERERIHG-  
 ZmTric2 158 AIFSLVSGMCPQAAVTCISFCGLQAFVTRQFQPCDFDPLRSLKIRLVEGLKREKNNFKKGHTD|TPLLTDS--ALRDVRIPPGPRLLILDH|Q-RDPELTERERIHG-  
 ZmTric3 159 AIFSLVSGMCPQAAVTCISFCGLQAFVTRQFQPCDFDPLRSLKIRLVEGLKREKNNFKKGHTD|TPLLTDS--ALRDVRIPPGPRLLILDH|Q-RDPELTERERIHG-  
 VvTric1 145 AIFSLVSGMCPQAAVTCISFCGLQAFVTRQFQPCDFDPLRSLKIRLVEGLKREKNNFKKGHTD|TPLLTDS--ALRDVRIPPGPRLLILDH|Q-RDPELTERERIHG-  
 VvTric2 140 AIFSLVSGMCPQAAVTCISFCGLQAFVTRQFQPCDFDPLRSLKIRLVEGLKREKNNFKKGHTD|TPLLTDS--ALRDVRIPPGPRLLILDH|Q-RDPELTERERIHG-  
 VvTric3 60 AIFSLVSGMCPQAAVTCISFCGLQAFVTRQFQPCDFDPLRSLKIRLVEGLKREKNNFKKGHTD|TPLLTDS--ALRDVRIPPGPRLLILDH|Q-RDPELTERERIHG-  
 OsmTric 154 AIFSLVSGMCPQAAVTCISFCGLQAFVTRQFQPCDFDPLRSLKIRLVEGLKREKNNFKKGHTD|TPLLTDS--ALRDVRIPPGPRLLILDH|Q-RDPELTERERIHG-  
 MtTric 147 VAFSLVSGMCPQAAVTCISFCGLQAFVTRQFQPCDFDPLRSLKIRLVEGLKREKNNFKKGHTD|TPLLTDS--ALRDVRIPPGPRLLILDH|Q-RDPELTERERIHG-  
 StTric 147 VAFSLVSGMCPQAAVTCISFCGLQAFVTRQFQPCDFDPLRSLKIRLVEGLKREKNNFKKGHTD|TPLLTDS--ALRDVRIPPGPRLLILDH|Q-RDPELTERERIHG-  
 PpTric1 78 AIFSLVSGMCPQAAVTCISFCGLQAFVTRQFQPCDFDPLRSLKIRLVEGLKREKNNFKKGHTD|TPLLTDS--ALRDVRIPPGPRLLILDH|Q-RDPELTERERIHG-  
 PpTric2 137 AIFSLVSGMCPQAAVTCISFCGLQAFVTRQFQPCDFDPLRSLKIRLVEGLKREKNNFKKGHTD|TPLLTDS--ALRDVRIPPGPRLLILDH|Q-RDPELTERERIHG-  
 PtTric1 147 AIFSLVSGMCPQAAVTCISFCGLQAFVTRQFQPCDFDPLRSLKIRLVEGLKREKNNFKKGHTD|TPLLTDS--ALRDVRIPPGPRLLILDH|Q-RDPELTERERIHG-  
 PtTric2 145 AIFSLVSGMCPQAAVTCISFCGLQAFVTRQFQPCDFDPLRSLKIRLVEGLKREKNNFKKGHTD|TPLLTDS--ALRDVRIPPGPRLLILDH|Q-RDPELTERERIHG-  
 VcTric 128 VAFSVVUS-GSPNPIOSAUTGAAFLNGLIVQGAFK-PFADTDDRGKYMVLK|TGLTQYADN|KKGLTD|TPLLTDS--ALRDVRIPPGPRLLILDH|Q-RDPELTERERIHG-

**Figure S1. Protein sequence alignment.** Multiple sequence alignment (Clustal Omega) of all Tric orthologs from 17 plant species and algae (red, green and brown), with plant species chosen as representatives of each evolutionary clade from *Physcomitrella patens* (Pp) to *Eucalyptus grandis*, (Eg). Abbreviations: Br = *Brassica rapa*, Cru = *Capsella rubella*, Cre = *Chlamydomonas reinhardtii*, Cs = *Cucumis sativus*, Dm = *Drosophila melanogaster*, Eg = *Eucalyptus grandis*, Gm = *Glycine max*, Mt = *Medicago truncatula*, Os = *Oryza sativa*, Pp = *Physcomitrella patens*, Pt = *Populus trichocarpa*, Rc = *Ricinus communis*, Sc = *Saccharomyces cerevisiae*, Sm = *Selaginella moellendorffii*, St = *Solanum tuberosum*, Vv = *Vitis Vinifera*, Vc = *Volvox carteri*, Zm = *Zea mays*.