**Supplementary Table 6.** Names, abbreviations and codes for all sequences included in the WD40 phylogenetic analysis. In purple are all new sequences isolated in this work.

|  |  |  |  |
| --- | --- | --- | --- |
| **Species** | **Original Code** | **Assigned name in the tree** | **Database** |
| *Amborella\_trichopoda* | AmtrTTG1 | Amborella\_trichopoda\_TTG1 | Phytozome |
| *Aquilegia\_coerulea* | Aqcoe1G412500 | Aquilegia\_coerulea\_TTG1\_Aqcoe1G412500 | Phytozome |
| *Arabidopsis\_halleri* | Araha.0138s0001 | Arabidopsis\_halleri\_TTG1\_Araha.0138s0001 | Phytozome |
| *Arabidopsis\_lyrata* | AL6G36110 | Arabidopsis\_lyrata\_TTG1\_AL6G36110 | Phytozome |
| *Arabidopsis\_thaliana* | At5g24520 | Arabidopsis\_thaliana\_TTG1\_At5g24520 | Phytozome |
| *Aristolochia\_arborea* | DN55268\_c1\_g1\_i3 | Aristolochia\_arborea\_AarTTG1\_DN55268\_c1\_g1\_i3 | Evo Devo Transcriptomes |
| *Aristolochia\_clematitis* | DN9770\_c3\_g1\_i3 | Aristolochia\_clematitis\_AcleTTG1\_DN9770\_c3\_g1\_i3 | Evo Devo Transcriptomes |
| *Aristolochia\_deltantha* | DN18193\_c2\_g7\_i1 | Aristolochia\_deltantha\_AdelTTG1\_DN18193\_c2\_g7\_i1 | Evo Devo Transcriptomes |
| *Aristolochia\_fimbriata* | DN11667\_c3\_g3\_i2 | Aristolochia\_fimbriata\_AfimTTG1\_DN11667\_c3\_g3\_i2 | Evo Devo Transcriptomes |
| *Aristolochia\_macrophylla* | DN16551\_c0\_g2\_i1 | Aristolochia\_macrophylla\_AmacTTG1\_DN16551\_c0\_g2\_i1 | Evo Devo Transcriptomes |
| *Aristolochia\_praevenosa* | DN20875\_c2\_g3\_i1 | Aristolochia\_praevenosa\_ApraTTG1\_DN20875\_c2\_g3\_i1 | Evo Devo Transcriptomes |
| *Aristolochia\_ringens* | DN16182\_c2\_g1\_i1 | Aristolochia\_ringens\_ArinTTG1\_DN16182\_c2\_g1\_i1 | Evo Devo Transcriptomes |
| *Asarum\_canadense* | DN20016\_c2\_g3\_i1 | Asarum\_canadense\_AcanTTG1\_DN20016\_c2\_g3\_i1 | Evo Devo Transcriptomes |
| *Asarum\_europaeum* | DN2725\_c0\_g1\_i1 | Asarum\_europaeum\_AeurTTG1\_DN2725\_c0\_g1\_i1 | Evo Devo Transcriptomes |
| *Brachypodium\_stacei* | Brast04G103200 | Brachypodium\_stacei\_TTG1\_Brast04G103200 | Phytozome |
| *Brassica\_oleracea* | Bol022420 | Brassica\_oleracea\_TTG1\_Bol022420 | Phytozome |
| *Brassica\_rapa* | Brara.F02668 | Brassica\_rapa\_TTG1\_Brara.F02668 | Phytozome |
| *Capsella\_rubella* | Carubv10001339 | Capsella\_rubella\_TTG1\_Carubv10001339 | Phytozome |
| *Carica\_papaya* | evm.TU.supercontig\_3.159 | Carica\_papaya\_TTG1\_evm.TU.supercontig\_3.159 | Phytozome |
| *Citrus\_clementina* | Ciclev10005375m | Citrus\_clementina\_TTG1\_Ciclev10005375m | Phytozome |
| *Daucus\_carota* | DCAR\_020377 | Daucus\_carota\_TTG1\_DCAR\_020377 | Phytozome |
| *Eutrema\_salsugineum* | Thhalv10004515 | Eutrema\_salsugineum\_TTG1\_Thhalv10004515 | Phytozome |
| *Fragaria\_vesca* | gene12450 | Fragaria\_vesca\_TTG1\_gene12450 | Phytozome |
| *Glycine\_max* | Glyma.06G136900 | Glycine\_max\_TTG1\_Glyma.06G136900 | Phytozome |
| *Kalanchoe\_dp* | Kaladp0008s0695 | Kalanchoe\_dp\_Kaladp0008s0695 | Phytozome |
| *Kalanchoe\_laxiflora* | Kalax.0140s0046 | Kalanchoe\_laxiflora\_Kalax.0140s0046 | Phytozome |
| *Mimulus\_guttatus* | Migut.F00147 | Mimulus\_guttatus\_TTG1\_Migut.F00147 | Phytozome |
| *Panicum\_hallii* | Pahal.A02930 | Panicum\_hallii\_TTG1\_Pahal.A02930 | Phytozome |
| *Panicum\_virgatum* | Pavir.Ab02709 | Panicum\_virgatum\_TTG1\_Pavir.Ab02709 | Phytozome |
| *Phaseolus\_vulgaris* | Phvul.009G044700 | Phaseolus\_vulgaris\_TTG1\_Phvul.009G044700 | Phytozome |
| *Populus\_trichocarpa* | Potri.015G002600 | Populus\_trichocarpa\_TTG1\_Potri.015G002600 | Phytozome |
| *Ricinum\_communis* | 29428.t000006 | Ricinum\_communis\_TTG1\_29428.t000006 | Phytozome |
| *Salix\_purpurea* | SapurV1A.0326s0450 | Salix\_purpurea\_TTG1\_SapurV1A.0326s0450 | Phytozome |
| *Salix\_purpurea* | SapurV1A.0662s0190 | Salix\_purpurea\_TTG1\_SapurV1A.0662s0190 | Phytozome |
| *Saruma\_henryi* | DN17550\_c0\_g1\_i1 | Saruma\_henryi\_ShenTTG1\_DN17550\_c0\_g1\_i1 | Evo Devo Transcriptomes |
| *Setaria\_viridis* | Sevir.1G278700 | Setaria\_viridis\_TTG1\_Sevir.1G278700 | Phytozome |
| *Solanum\_lycopersicum* | Solyc03g081210.1 | Solanum\_lycopersicum\_Solyc03g081210.1 | Phytozome |
| *Solanum\_tuberosum* | PGSC0003DMG400000561 | Solanum\_tuberosum\_TTG1\_PGSC0003DMG400000561 | Phytozome |
| *Solanum\_tuberosum* | PGSC0003DMG400026477 | Solanum\_tuberosum\_TTG1\_PGSC0003DMG400026477 | Phytozome |
| *Solanum\_tuberosum* | PGSC0003DMG400044039 | Solanum\_tuberosum\_TTG1\_PGSC0003DMG400044039 | Phytozome |
| *Theobroma\_cacao* | Thecc1EG015520 | Theobroma\_cacao\_TTG1\_Thecc1EG015520 | Phytozome |
| *Thottea\_siliquosa* | DN18110\_c0\_g1\_i1 | Thottea\_siliquosa\_ThsiTTG1\_DN18110\_c0\_g1\_i1 | Evo Devo Transcriptomes |
| *Trifolium\_pratense* | Tp57577 | Trifolium\_pratense\_TTG1\_Tp57577 | Phytozome |
| *Zea\_mays* | GRMZM2G058292 | Zea\_mays\_TTG1\_GRMZM2G058292 | Phytozome |