```
Lcom Icpid24707 | OG0 |
                       •Scil scict024349.1 | OG0 |
           99
                          Gracom_Gcom_C547796_01 | OG0 |
                99
                          •Leuniv_Lniv_C766799_01 | OG0 |
66
                        •Lcom | lcpid245779 | OG1 |
                   •Mylflu EP00047 Mylnosiga fluctuans P003427 | OG1 |
    79
                      •Acaspe_EP00035_Acanthoeca_spectabilis_P023744 | OG1 |
                       Helnan_EP00037_Helgoeca_nana_P020746 | OG1 |
         96
                  100
                     1001Helnan_EP00037_Helgoeca_nana_P020747 | OG1 |
            76
                       Salkve EP00050 Salpingoeca kvevrii P006139 | OG1 |
                         Didcos EP00039 Didymoeca costata P018452 | OG1 |
                             Diagra_EP00040_Diaphanoeca_grandis_P038512 | OG1 |
                  100
                              Stedip_EP00041_Stephanoeca_diplocostata_P039819 | OG1 |
                    99
                               •Acaspe_EP00035_Acanthoeca_spectabilis_P020671 | OG1 |
                       100
                               •Helnan_EP00037_Helgoeca_nana_P032208 | OG1 |
         Clacor Ccor scaffold13862 01 | OG2 |
          Leuniv Lniv scaffold25955 01 | OG2 |
   98
               •Gracom_Gcom_scaffold18187_01 | OG2 |
     100
              •Lcom_lcpid75614 | OG2 |
               Lcom | lcpid173923 | OG2 |
             100 Scil_scict019756.1 | OG2 |
              -Salmac_EP00052_Salpingoeca_macrocollata_P030592 | OG3 |
       100
               Salpun_EP00053_Salpingoeca_punica_P013999 | OG3 |
                 ·Saldol_EP00054_Salpingoeca_dolichothecata_P006807 | OG3 |
     61
                            Lcom | lcpid246434 | OG3 |
         68
                        •Lcom lcpid224775 | OG3 |
                 •Salurc_EP00051_Salpingoeca_urceolata_P000113 | OG3 |
                  Lcom_lcpid238347 | OG3 |
         81
66
                        Salinf EP00049 Salpingoeca infusionum P002344 | OG3 |
                        •Microa EP00043 Microstomoeca roanoka_P011125 | OG3 |
           62
                100
                   100
                           Sros EGD75842 | OG3 |
             100
                       •Mbre_EDQ86915 | OG3 |
                        •Chofle_EP00730_Choanoeca_flexa_P008510 | OG3 |
                   1001—Choper EP00045_Choanoeca_perplexa_P005046 | OG3 |
              Dgig XM 028537252.1 | OG4 |
         100<sup>1</sup>-Xesp_022226-T1 | OG4 |
                     •Spur_XM_030973985.1 | OG4 |
             51
                    •Hvul_g33570_1 | OG4 |
                   -Morvir_scaffold3.g31.t1 | OG4 |
      63
          75
                    •Sanmal Sma 023890-T1 | OG4 |
  41
             50
                                 Lcom lcpid245087 | OG4 |
                     •Rhoesc Res 007398-T1 | OG4 |
        65
                 <sup>100</sup>□•Nemnom_g5724.t1 | OG4 |
                Nvec_v1g164749 | OG4 |
                    Exapal XM 021050313.2 | OG4 |
           100
                        Gfas gfas1.m1.2017.m1 | OG4 |
             100
                        •Amil_Amillepora26546-RA | OG4 |
                          Adig_XM_015897238.1 | OG4 |
                     99
                100
                        <sup>1001</sup>•Adig_XM_015897168.1 | OG4 |
                   95
                                   •Gfas gfas1.m1.21616.m1 | OG4 |
                             Spis XP 022785202 1 | OG4 |
                          <sup>100</sup> Pocdam_XM_027182573.1 | OG4 |
                             •Fspp_ffun1.m4.14613.m1 | OG4 |
                               •Gasp_gasp1.m3.5101.m1 | OG4 |
                            <sup>981</sup>--Fspp_ffun1.m4.30522.m1 | OG4 |
    36
                    •Lcom | lcpid217748 | OG5 |
                   •Ocar_g2861 | OG5 |
          80
                100 Opea_EP00118_Oscarella_pearsei_P023397 | OG5 |
                   Plajan Pjan scaffold12737 01 | OG5 |
                <sup>1001</sup>Plajan Pjan scaffold12736 01 | OG5 |
        41
                  TrH2 TrispH2 002963-RA | OG5 |
               <sup>[100]</sup>-Tadh_TriadT30808 | OG5 |
                    01H11_MRNA3432 | OG5 |
                       <sub>!</sub>HoiH23_PIH23_008897-RA | OG5 |
               99
                    <sup>100</sup>1•HoiH06_mRNA14 | OG5 |
                  100
                       <u> Hhon_g</u>07402.t1 | OG5 |
                     <sup>1001</sup>HoiH04 mRNA7509 | OG5 |
                    Spolac c102018 g3 i1 m.27634c102018-g3 | OG6 |
               100
                       •Tetwil_g26238.t2 | OG6 |
                      ·Xestes_maker-XT_scaffold3979-augustus-gene-0.30-mRNA-1 | OG6 |
             96
                      •Aque_Aqu2.1.26965_001 | OG6 |
                100
                      •Halamb c35619 g1 i1m.8833 | OG6 |
      33
                     •Hsap_ENST00000409546 | OG6 |
          36
                          •Tcas_TC034458_001 | OG6 |
                             •Dpul_mRNA14265 | OG6 |
                 89
                        <sup>100</sup><sup>1</sup>-Dpul_mRNA14266 | OG6 |
             64
                                 •Tcas_TC034459_001 | OG6 |
                   92
                          <sub>"</sub>Cscu_XM_023363547.1 | OG6 |
                            •Cscu_XM_023363546.1 | OG6 |
                         61<sup>1</sup>-Cscu_XM_023357888.1 | OG6 |
                          •Bralan BLAG17000360 3 | OG6 |
                   85
                           Skow_XM_006825790.1 | OG6 |
                            •Ctel_gnl_WGS_AMQN_CAPTEDRAFT_mRNA174827 | OG6 |
                 61
                              •Lcom_lcpid112053 | OG6 |
        50
                                 •Clacor_Ccor_C521983_01 | OG6 |
                                  Lcom | lcpid224151 | OG6 |
                     69
                              ·Cgig_XM_034447444.1 | OG6 |
                                      •Lcom_lcpid220008 | OG6 |
                              <sub>•</sub>Acagra_model.g22821.t1 | OG6 |
                            <sup>100</sup>-Acagra_model.g22821.t1.1.5d400f2d | OG6 |
                 •Plespi_Pspi_scaffold16937_01 | OG6 |
                       •Eupdun_Edun_sb10655731 | OG6 |
                           -Lampan_Lpan_C409811_01 | OG6 |
                             •Vmul_sbMO430025 | OG6 |
                               Coeast_Cast_sb812530 | OG6 |
                         100
          59
                                 Coeast_Cast_sb812522 | OG6 |
                            100
                                   Coeast_Cast_sb812541 | OG6 |
                               16
                                      Coeast_Cast_sb812524 | OG6 |
                                       Coeast_Cast_sb812512 | OG6 |
                                 13
                                       Coeast_Cast_sb812527 | OG6 |
                  100
                                         20
                                       <sup>63</sup> Coeast_Cast_sb812521 | OG6 |
                                           Coeast_Cast_sb812514 | OG6 |
                                         Coeast_Cast_sb812499 | OG6 |
                    95
                                               Coeast Cast sb812501 | OG6 |
                                                Coeast_Cast_sb812495 | OG6 |
                                                 <sub>]</sub>Coeast_Cast_sb812504 | OG6 |
                                                <sup>1</sup> Coeast_Cast_sb812497 | OG6 |
                              <sup>100</sup>-Mlei_ML4584.g1.i1 | OG6 |
                              Bolinf Binf sb1233039 | OG6 |
                                •Bolinf_Binf_sb1233038 | OG6 |
                           100
                                  •Mertsp_Mesp_sb575611 | OG6 |
                              38
                                    Mertsp Mesp sb575612 | OG6 |
                                      Bolinf Binf sb1233040 | OG6 |
                                           Bolinf_Binf_sb1233041 | OG6 |
                                             Bolinf_Binf_sb1233042 | OG6 |
                       95
                                           96 Bolinf Binf sb1233043 | OG6 |
                                <sub>!</sub>Drygla_Dgla_sb290907 | OG6 |
                             <sup>100</sup> Drygla_Dgla_sb290908 | OG6 |
                           83
                                Horcal_Hcv1.av93.c3.g901.i1 | OG6 |
                                  Pbac_sb2639393 | OG6 |
                                <sup>95</sup> Pbac_sb2639394 | OG6 |
                                  Drygla Dgla sb313299 | OG6 |
                                   •Beraby_Baby_sb340064 | OG6 |
                                     Bolinf_Binf_sb1208368 | OG6 |
                                       Beraby_Baby_sb340062 | OG6 |
                           100
                                     <sup>691</sup>Beraby_Baby_sb340063 | OG6 |
                                  •Bolinf Binf sb1245476 | OG6 |
                                   Bolinf_Binf_sb1245474 | OG6 |
                                     Bolinf Binf sb1245475 | OG6 |
                                       Mertsp_Mesp_sb577850 | OG6 |
                                     411-Mertsp Mesp sb577849 | OG6 |
```