```
Clacor_Ccor_C542119 01 | OG0 |
                                       •Scil scict017046.1 | OG0 |
100
             Lcom | lcpid53653 | OG0 |
   99
           100 Lcom | lcpid60152 | OG0 |
                                    Didcos EP00039 Didymoeca costata P007921 | OG1 |
                                           Diagra EP00040 Diaphanoeca grandis P013309 | OG1 |
            99
                                   Acaspe EP00035 Acanthoeca spectabilis P021549 | OG1 |
                 100
                                     •Helnan_EP00037_Helgoeca_nana_P025829 | OG1 |
                                  Stedip EP00041 Stephanoeca_diplocostata_P010539 | OG1 |
                    100
                              100 Stedip EP00041 Stephanoeca_diplocostata_P010540 | OG1 |
      100
                    Saldol EP00054 Salpingoeca dolichothecata P010656 | OG1 |
                              •Salkve_EP00050_Salpingoeca_kvevrii_P019729 | OG1 |
                 99
                             Salurc EP00051 Salpingoeca urceolata P004904 | OG1 |
              100
                           -Salmac_EP00052_Salpingoeca_macrocollata_P034070 | OG1 |
         89
                          Salpun EP00053 Salpingoeca punica P027584 | OG1 |
                 100
                             -Salpun_EP00053_Salpingoeca_punica_P026860 | OG1 |
                              •Codhol EP00042 Codosiga hollandica P036037 | OG1 |
           81
                                   •Mylflu EP00047 Mylnosiga fluctuans P010035 | OG1 |
                85
                              •Mylflu_EP00047_Mylnosiga_fluctuans_P023178 | OG1 |
                   100
                         63<sup>1</sup>Mylflu EP00047 Mylnosiga_fluctuans_P023175 | OG1 |
                           Salinf EP00049 Salpingoeca infusionum P023540 | OG1 |
                            •Microa EP00043 Microstomoeca roanoka P014562 | OG1 |
                100
                      100
                            •Sros_EGD76733 | OG1 |
                   99
                               •Mbre EDQ85516 | OG1 |
                               •Chofle EP00730 Choanoeca flexa P007748 | OG1 |
                     100
                          100
                               •Choper EP00045 Choanoeca perplexa P006230 | OG1 |
               •Plajan Pjan C566270 01 | OG1 |
100
                Popea_EP00118_Oscarella_pearsei_P025424 | OG1 |
        100
              <sup>100</sup> Ocar_g8928 | OG1 |
               Plespi Pspi scaffold1317 01 | OG1 |
     47
                  Xestes maker-XT scaffold49570-augustus-gene-0.5-mRNA-1 | OG1 |
                      -Halamb_c46586_g1_i1m.20865 | OG1 |
           95
       95
                      Aque_Aqu2.1.31233_001 | OG1 |
                100
                   <sup>100</sup> Aque _Aqu2.1.14162_001 | OG1 |
         97
                   •Tetwil g26859.t1 | OG1 |
                    Stycar maker-SC scaffold4135-snap-gene-0.5-mRNA-1 | OG1 |
                  Stycar_snap_masked-SC_scaffold643-processed-gene-0.1-mRNA-1 | OG1 |
           100
                        <sub>|</sub>Spolac_c102820_g1_i1_m.31153c102820-g1 | OG1 |
              70
                     <sup>1001</sup>Spolac_c102820_g1_i2_m.31154c102820-g1 | OG1 |
                        Emue Em0006g528a.t1 | OG1 |
                     <sup>100</sup>-Emue Em0006g530a.t1 | OG1 |
                    TrH2_TrispH2_007176-RA | OG1 |
                 <sup>100</sup> Tadh TriadT20353 | OG1 |
                        -HoiH23 PIH23 003962-RA | OG1 |
              100
                    <sup>100</sup>-HoiH06 mRNA15015 | OG1 |
   51
                 100
                       Hhon g06825.t1 | OG1 |
                    <sup>100</sup> HoiH04_mRNA14318 | OG1 |
                                               •Tcas_TC009451_001 | OG1 |
                 96
                                                 •Cscu XM 023388097.1 | OG1 |
                            •Lcom lcpid187815 | OG1 |
                                   •Lcom_lcpid179566 | OG1 |
           73
                         Acagra model.g2937.t1 model.g2941.t1 | OG1 |
                             •Lcom_lcpid185640 | OG1 |
                            Cgig XM 034444005.1 | OG1 |
                          <sup>1001</sup>Caia XM_011422052.3 | OG1 |
              79
                               •Hsap ENST00000368099 | OG1 |
                          Lcom_lcpid250274 | OG1 |
                   95
                       <sup>100</sup> -Lcom_lcpid239499 | OG1 |
                          Skow XM 002738911.2 | OG1 |
                93
     44
                            Spur XM 030978424.1 | OG1 |
         70
                  97
                          Bralan_BLAG03002259_1 | OG1 |
                             -Bralan BLAG07001169 1 | OG1 |
                        •Chem_TCONS_00005139 | OG1 |
                 100
                           •Hvul_g25683_1 | OG1 |
                        Morvir scaffold230.g14.t1 | OG1 |
             100
                          Sanmal Sma 015549-T1 | OG1 |
                             Aaur scaffold816.g5.t1 | OG1 |
                   100
                             •Rhoesc_Res_007763-T1 | OG1 |
                       100
                               <sub>.</sub>Nemnom_g5441.t1 | OG1 |
                          100
           89
                             <sup>100</sup> Nemnom_g3709.t1 | OG1 |
                    -Dgig XM 028545563.1 | OG1 |
                     •Xesp_028980-T1 | OG1 |
                         •Exapal_XM_028661389.1 | OG1 |
                        •Nvec v1g47852 | OG1 |
                     <sup>1001</sup>Nvec_v1g169166 | OG1 |
       48
                         Gasp_gasp1.m3.4472.m1 | OG1 |
                100
                           •Fspp_ffun1.m4.305.m1 | OG1 |
                            •Spis_XP_022793183_1 | OG1 |
                          881-Pocdam_XM_027191801.1 | OG1 |
                         Gfas_gfas1.m1.11261.m1 | OG1 |
                             •Spis Spis 25679 1 | OG1 |
                               •Adig_XM_015923983.1 | OG1 |
                        86
                                <sub>5</sub>Amil_Amillepora32009-RA | OG1 |
                             <sup>100</sup> Amil Amillepora32020-RA | OG1 |
                        •Vmul_sbMO453581 | OG1 |
                        Coemet_Cmet_C603764_01 | OG1 |
                           Coeast_Cast_sb800826 | OG1 |
                     100
                            Coeast_Cast_sb800825 | OG1 |
                               <sub>!</sub>Coeast_Cast_sb800823 | OG1 |
                            <sup>91</sup> Coeast Cast_sb800824 | OG1 |
              100
                      -Lampan_Lpan_C417343_01 | OG1 |
                          Eupdun Edun sb10667150 | OG1 |
                            Eupdun_Edun_sb10667151 | OG1 |
                              <sub>s</sub>Eupdun_Edun_sb10667148 | OG1 |
                 100
                            911Eupdun_Edun_sb10667149 | OG1 |
                           Bolinf Binf sb1277998 | OG1 |
                                Bolinf_Binf_sb1277997 | OG1
                             65 Bolinf_Binf_sb1277996 | OG1 |
                        100
                                <sup>1</sup> Mertsp_Mesp_sb592544 | OG1 |
                                Mertsp_Mesp_sb592546 | OG1 |
                                    Bolinf_Binf_sb1278001 | OG1 |
                                  <sup>99</sup> Mertsp Mesp sb592549 | OG1 |
                                    Mertsp_Mesp_sb592545 | OG1 |
                      89
                                  <sup>78</sup> Mertsp_Mesp_sb592548 | OG1 |
                             Drygla_Dgla_sb299890 | OG1 |
                          <sup>100</sup> Drygla_Dgla_sb299891 | OG1 |
                                Horcal_Hcv1.av93.c11.g528.i1 | OG1 |
                             <sup>100</sup> Pbac_sb2659844 | OG1 |
                        88
                                    Beraby_Baby_sb348302 | OG1 |
                                  98 Mertsp Mesp sb586514 | OG1 |
                                    <sup>1</sup> Drygla Dgla sb292387 | OG1 |
                               100
                                    Bolinf_Binf_sb1264554 | OG1 |
                                      <sup>501</sup>-Bolinf_Binf_sb1264555 | OG1 |
                                        Beraby_Baby_sb348300 | OG1 |
                                      98<sup>1</sup>Beraby_Baby_sb348301 | OG1 |
                                    Vmul sbMO387751 | OG1 |
                                      <sub>_</sub>Mlei_ML4358.g27.i1 | OG1 |
                                    69<sup>1</sup>Vmul_sbMO428472 | OG1 |
                                    Bolinf_Binf_sb1279902 | OG1 |
                                      Bolinf Binf sb1279903 | OG1 |
                                 100
                                        Bolinf_Binf_sb1279908 | OG1 |
                                             Bolinf_Binf_sb1279904 | OG1 |
                                    42
                                               Bolinf_Binf_sb1279905 | OG1 |
                                                 Mertsp_Mesp_sb595875 | OG1 |
                                                  Mertsp_Mesp_sb595874 | OG1 |
                                                 <sup>11</sup>Mertsp Mesp sb595876 | OG1 |
                                               Mertsp Mesp sb595881 | OG1 |
                                               Mertsp_Mesp_sb595878 | OG1 |
                                               <sup>1</sup> Mertsp_Mesp_sb595882 | OG1 |
                                               Bolinf_Binf_sb1279909 | OG1 |
                                                   Mertsp_Mesp_sb595879 | OG1 |
                                                 <sup>1</sup> Mertsp_Mesp_sb595880 | OG1 |
                                                   •Mertsp_Mesp_sb595896 | OG1 |
                                                    Mertsp Mesp sb595893 | OG1 |
                                                        Mertsp_Mesp_sb595890 | OG1 |
                                                      99 Mertsp Mesp sb595889 | OG1 |
                                                        <u>|</u>Mertsp_Mesp_sb595892 | OG1 |
                                                        <sup>11</sup>Mertsp Mesp sb595894 | OG1 |
                                                           Mertsp_Mesp_sb595895 | OG1 |
                                                          Mertsp Mesp sb595897 | OG1 |
                                                            Bolinf_Binf_sb1279907 | OG1 |
                                                                Mertsp_Mesp_sb595887 | OG1 |
                                                                 Mertsp_Mesp_sb595886 | OG1 |
                                                                 <sup>1</sup>•Mertsp_Mesp_sb595888 | OG1 |
                                                               Mertsp_Mesp_sb595884 | OG1 |
                                                                Mertsp_Mesp_sb595885 | OG1 |
                                                                1<sup>†</sup> <sub>[</sub>Bolinf_Binf_sb1279906 | OG1 |
                                                                 0.416667
```