```
•Lcom_lcpid176681 | OG5 |
                          -Lcom_lcpid184801 | OG6 |
 87
              •Lcom_lcpid203575 | OG7 |
                   •Mylflu_EP00047_Mylnosiga_fluctuans_P002302 | OG3 |
    83
          96
                  Mylflu_EP00047_Mylnosiga_fluctuans_P003560 | OG3 |
      89
                  Mylflu EP00047 Mylnosiga_fluctuans_P003494 | OG4 |
                   Salmac_EP00052_Salpingoeca_macrocollata_P028245 | OG4 |
                    Salpun_EP00053_Salpingoeca_punica_P010358 | OG4 |
                     -Lcom_lcpid138791 | OG4 |
                     Lcom | lcpid116183 | OG4 |
                           Salinf EP00049 Salpingoeca infusionum P017904 | OG4 |
          84
                              •Microa_EP00043_Microstomoeca_roanoka_P029077 | OG4 |
                  100
                               •Sros_EGD80253 | OG4 |
                               •Mbre_EDQ86175 | OG4 |
                     96
                               •Choper_EP00045_Choanoeca_perplexa_P004406 | OG4 |
            86
                                   Chofle EP00730 Choanoeca flexa P014127 | OG4 |
                               <sup>100</sup> -Choper_EP00045_Choanoeca_perplexa_P004405 | OG4 |
                        Salkve EP00050 Salpingoeca kvevrii P018402 | OG4 |
                   <sup>100</sup> Salkve_EP00050_Salpingoeca_kvevrii_P018404 | OG4 |
                       •Salurc EP00051 Salpingoeca_urceolata_P026824 | OG4 |
                             Saldol_EP00054_Salpingoeca_dolichothecata_P037372 | OG4 |
                 69
                                   •Codhol_EP00042_Codosiga_hollandica_P047419 | OG4 |
                             Didcos_EP00039_Didymoeca_costata_P018856 | OG4 |
                              Diagra_EP00040_Diaphanoeca_grandis_P009977 | OG4 |
                                Stedip EP00041 Stephanoeca diplocostata P015391 | OG4 |
                                   •Acaspe_EP00035_Acanthoeca_spectabilis_P021177 | OG4 |
                                   -Helnan_EP00037_Helgoeca_nana_P029458 | OG4 |
                             -Lcom_lcpid227647 | OG0 |
              •Plajan_Pjan_scaffold21096_01 | OG0 |
            Opea EP00118 Oscarella pearsei P025039 | OG0 |
     99
             -Ocar_g8571 | OG0 |
                Plespi Pspi scaffold12484 01 | OG1 |
             <sup>100</sup>Plespi_Pspi_scaffold12485_01 | OG1 |
                    -Stycar_maker-SC_scaffold320-snap-gene-0.18-mRNA-1 | OG1 |
         100
                      •Tetwil g20023.t2 | OG1 |
                    -Emue Em0013g48a.t1 | OG1 |
            100
                 <sup>100</sup> Spolac_c98864_g1_i1_m.18211c98864-g1 | OG1 |
                      Xestes maker-XT scaffold24959-snap-gene-0.48-mRNA-1 | OG1 |
                        •Aque_Aqu2.1.41690_001 | OG1 |
     90
                    <sup>100</sup><sup>1</sup>-Halamb c35831_g1_i1m.8951 | OG1 |
               Clacor Ccor scaffold13088 01 | OG1 |
                     Clacor_Ccor_scaffold9997_01 | OG1 |
                          •Gracom_Gcom_scaffold13522_01 | OG1 |
                               Lcom_lcpid53860 | OG1 |
         100
                      100
                                    Leuniv_Lniv_scaffold12425_01 | OG1 |
                              Scil scict003733.3 | OG1 |
            53
                           <sup>1001</sup>Lcom_lcpid253267 | OG1 |
                       Lcom_lcpid67428 | OG1 |
                    <sup>100</sup>Lcom_lcpid58172 | OG1 |
                       •Leuniv_Lniv_scaffold16256_01 | OG1 |
                          Leuniv Lniv scaffold16255 01 | OG1 |
                           •Scil_scict005863.3 | OG1 |
                             <sub>!</sub>Gracom_Gcom_scaffold9363_01 | OG1 |
                          <sup>100</sup> Gracom_Gcom_scaffold9364_01 | OG1 |
                   •Hvul_g25706_1 | OG2 |
                   -Chem TCONS 00069919 | OG2 |
                   •Morvir_scaffold216.g6.t1 | OG2 |
           100
   81
                      <sub>'</sub>Sanmal_Sma_009068-T1 | OG2 |
                   <sup>1001</sup>-Sanmal_Sma_012505-T1 | OG2 |
                     -Aaur_scaffold559.g5.t1 | OG2 |
                        Nemnom g19442.t1 | OG2 |
       99
                     <sup>1001</sup>•Rhoesc_Res_003560-T1 | OG2 |
                •Dglg_XM_028535507.1 | OG2 |
             <sup>100</sup><sup>1</sup>-Xesp_013861-T1 | OG2 |
                  •Nvec_v1g192352 | OG2 |
                    Exapal_XM_021042506.1 | OG2 |
         92
                 <sup>100</sup> Exapal XM 021044585.1 | OG2 |
            100
                  •Fspp_ffun1.m4.6253.m1 | OG2 |
                       <sub>!</sub>Spis_XP_022785958_1 | OG2 |
               100
                    <sup>100</sup> Pocdam XM 027193797.1 | OG2 |
                       Gasp_gasp1.m3.14703.m1 | OG2 |
                         •Gfas_gfas1.m1.19745.m1 | OG2 |
                          -Amil_Amillepora01031-RA | OG2 |
                        <sup>991</sup>Adig XM 015907491.1 | OG2 |
               •Skow XM 006822661.1 | OG2 |
     84
                   -Spur XM 030985459.1 | OG2 |
              <sup>481</sup>•Skow _XM_006825674.1 | OG2 |
                   •Bralan_BLAG03001479_3 | OG2 |
                       •Hsap ENST00000315985 | OG2 |
         99
                      •Hsap ENST00000455566 | OG2 |
                100
                       -Hsap ENST00000394414 | OG2 |
                         •Hsap_ENST00000335585 | OG2 |
                        •Tcas_TC012273_001 | OG2 |
            53
                         •Dpul_mRNA20207 | OG2 |
                        Cscu XM 023387692.1 | OG2 |
                100
                         Cscu XM 023366262.1 | OG2 |
                      <sup>100</sup>-Cscu_XM_023366289.1 | OG2 |
                     •Acagra_model.g642.t1.1.5d3b825b | OG2 |
                        Ctel gnl WGS AMQN CAPTEDRAFT mRNA160144 | OG2 |
                          •Lcom | lcpid121010 | OG2 |
                          -Cgig XM 011418758.3 | OG2 |
                       <sup>96</sup> Lcom Icpid154197 | OG2 |
                 <sub>*</sub>TrH2_TrispH2_010299-RA | OG2 |
                   Tadh TriadT50614 | OG2 |
                      <sub>f</sub>Hhon g01324.t1 | OG2 |
                         -HoiH06 mRNA10411 | OG2 |
                           -HoiH23_PIH23_009219-RA | OG2 |
                         ¡Vmul_Simscaffold7516_01 | OG2 |
                            --Vmul_sbMO436583 | OG2 |
                        Coemet_Cmet_scaffold22348 01 | OG2 |
         84
                   100
                             •Coeast_Cast_sb787866 | OG2 |
                              Coeast_Cast_sb787865 | OG2 |
                             <sup>1]</sup>Coeast_Cast_sb787867 | OG2 |
                             <u> Coeast_Cast_sb787869 | OG2 |</u>
                           100
                              <sup>1</sup> Coeast_Cast_sb787870 | OG2 |
                        •Lampan_Lpan_C418415_01 | OG2 |
                          ¡Horcal_Hcv1.av93.c1.g673.i1 | OG2 |
                             Horcal_Hcv1.av93.c1.g673.i2 | OG2 |
                          <sup>100</sup> Pbac sb2655722 | OG2 |
                   95
                        •Mlei_ML0336.g8.i1 | OG2 |
                            Beraby Baby sb329811 | OG2 |
                         95
                              Drygla_Dgla_sb292574 | OG2 |
                            88 Drygla_Dgla_sb292576 | OG2 |
                       95
                              <sup>11</sup>Drygla Dgla sb292575 | OG2 |
                              Drygla Dgla sb292578 | OG2 |
                            gg PDrygla Dgla sb292581 | OG2 |
                                <u>-</u>Drygla_Dgla_sb292577 | OG2 |
                               <sup>1</sup>•Drygla_Dgla_sb292582 | OG2 |
0.416667
```