```
-Acagra_model.g27009.t1 | OG0 |
               TrH2 TrispH2 000279-RA | OG0 |
 29
            <sup>100</sup>-Tadh_TriadT36434 | OG0 |
                 •HoiH11_mRNA7495 | OG0 |
                     HoiH23_PIH23_003080-RA | OG0 |
            100
                  <sup>100</sup><sup>1</sup>-HoiH06_mRNA659 | OG0 |
               100
                     <sub>f</sub>Hhon_g05982.t1 | OG0 |
                  <sup>100</sup> HoiH04 mRNA15907 | OG0 |
                      Spur XM 786289.5 | OG1 |
                   •Morvir scaffold54.g29.t1 | OG1 |
     79
                       •Hvul g3333 1 | OG1 |
               100
       95
                         •Chem_TCONS_00058316 | OG1 |
                    •Rhoesc Res 006494-T1 | OG1 |
          99
                <sup>100</sup><sup>1</sup>•Nemnom_g14779.t1 | OG1 |
                     Aaur scaffold363.g22.t1 | OG1 |
                        Sanmal Sma 019209-T1 | OG1 |
   78
                   <sup>1001</sup>•Sanmal Sma 019210-T1 | OG1 |
              •Xesp_004916-T1 | OG1 |
                •Dgig_XM_028540903.1 | OG1 |
        100
                •Xesp 004917-T1 | OG1 |
                    •Exapal XM 021057502.2 | OG1 |
     95
         100
                    •Nvec_v1g12130 | OG1 |
                                   -Gasp gasp1.m3.31913.m1 | OG1 |
       96
              <sup>87</sup> -Fspp_ffun1.m4.24324.m1 | OG1 |
                      •Gfas gfas1.m1.1806.m1 | OG1 |
           100
                       Amil Amillepora21911-RA | OG1 |
                    100<sup>1</sup>•Adig_XM_015899474.1 | OG1 |
                       •Fspp_ffun1.m4.24323.m1 | OG1 |
              63
                                •Gasp_gasp1.m3.14155.m1 | OG1 |
                        Gasp_gasp1.m3.14153.m1 | OG1 |
                 64
                            •Fspp ffun1.m4.24326.m1 | OG1 |
                           Pocdam XM 027198033.1 | OG1 |
                            Spis_XP_022790604_1 | OG1 |
                         <sup>100</sup> Spis_XP_022783958_1 | OG1 |
                 Skow XM 006820697.1 | OG2 |
                    •Hsap ENST00000219150 | OG2 |
                    •Hsap ENST00000345068 | OG2 |
           100
                      •Hsap ENST00000341356 | OG2 |
              99
     70
                       •Hsap ENST00000420959 | OG2 |
                       •Bralan_BLAG01002520_1 | OG2 |
                       Ctel gnl WGS AMQN CAPTEDRAFT mRNA165940 | OG2 |
                         •Ctel_gnl_WGS_AMQN_CAPTEDRAFT_mRNA112570 | OG2 |
           66
       89
                           Cgig XM 011431171.3 | OG2 |
              99
                           Lcom | lcpid74137 | OG2 |
                        100 Lcom | lcpid74931 | OG2 |
                         Acagra model.g14842.t1 model.g14843.t1 | OG2 |
                           Acagra_model.g14842.t1_model.g14843.t1.1.5d400c67 | OG2 |
         63
                         1001Acagra model.g14842.t1 model.g14843.t1.2.5d400c67 | OG2 |
                    Cscu XM 023364677.1 | OG2 |
                    •Cscu XM 023366097.1 | OG2 |
              100
                       -Cscu XM 023366096.1 | OG2 |
                    <sup>100</sup><sup>1</sup>-Cscu_XM_023366120.1 | OG2 |
           92
                    •Tcas TC015441 001 | OG2 |
                           Dpul_mRNA8320 | OG2 |
                        <sup>100</sup> -Dpul mRNA18458 | OG2 |
                       •Dpul mRNA8688 | OG2 |
                 91
                                            •Dpul_mRNA25474 | OG2 |
                                         <sup>100</sup>-Dpul_mRNA25477 | OG2 |
                      •Xestes_maker-XT_scaffold5590-augustus-gene-0.6-mRNA-1 | OG3 |
                         •Halamb_c18132_g1_i1m.3096 | OG3 |
              100
                          •Halamb_c42814_g1_i1m.15349 | OG3 |
                 100
                          •Aque_Aqu2.1.43522_001 | OG3 |
          100
                        Plespi_Pspi_scaffold17101_01 | OG3 |
                    <sup>100</sup> Plespi_Pspi_scaffold17102_01 | OG3 |
                          •Tetwil_g5243.t1 | OG3 |
                         Stycar maker-SC scaffold58-snap-gene-0.14-mRNA-1 | OG3 |
                100
                           •Emue_Em0010g895a.t1 | OG3 |
                              Spolac_c112723_g1_i1_m.46102c112723-g1 | OG3 |
       44
                           <sup>100</sup> Spolac_c79296_g1_i1_m.2331c79296-g1 | OG3 |
                        •Plajan Pjan scaffold23497 01 | OG3 |
                        Ocar g3211 | OG3 |
                    <sup>100</sup> Opea_EP00118_Oscarella_pearsei_P024566 | OG3 |
                               -Lampan_Lpan_11803_01 | OG3 |
                                    Vmul Simscaffold8844_01 | OG3 |
         81
                                     •Coemet_Cmet_scaffold20149_01 | OG3 |
                                        •Coeast_Cast_sb787523 | OG3 |
                         100
                                          Coeast Cast sb787522 | OG3 |
                                             Coeast Cast sb787525 | OG3 |
                                          <sup>100</sup> Coeast_Cast_sb787524 | OG3 |
                                    Mertsp_Mesp_sb597196 | OG3 |
                                      •Mertsp_Mesp_sb597197 | OG3 |
                                 100
                                        Mertsp Mesp sb597194 | OG3 |
                                          Mertsp Mesp sb597195 | OG3 |
                                           Bolinf_Binf_sb1251881 | OG3 |
                                          <sup>99</sup> Bolinf Binf_sb1251882 | OG3 |
                              98
                                        •Beraby_Baby_sb340450 | OG3 |
                                        Mlei_ML0917.g9.i1 | OG3 |
                                     100 Vmul sbMO440647 | OG3 |
                                          •Pbac_sb2648060 | OG3 |
                                        <sup>561</sup>•Pbac_sb2657675 | OG3 |
                                99
                                          Horcal_Hcv1.av93.c2.g1519.i1 | OG3 |
                                        92 Horcal Hcv1.av93.c2.g1519.i2 | OG3 |
                                  87
                                           Drygla Dgla sb301139 | OG3 |
                                         Drygla_Dgla_sb301140 | OG3 |
                                             Prygla_Dgla_sb301141 | OG3 |
                                           98 Drygla_Dgla_sb301142 | OG3 |
                           •Spur_XM_003726969.3 | OG4 |
     50
                          -Bralan_BLAG19000604_2 | OG4 |
                          •Hsap ENST00000261861 | OG4 |
                    100
                            •Hsap ENST00000343933 | OG4 |
                         Cscu XM 023370671.1 | OG4 |
           75
                          Cscu XM 023378852.1 | OG4 |
                            •Tcas_TC004245_001 | OG4 |
                           •Dpul mRNA13723 | OG4 |
                         Skow XM 006823226.1 | OG4 |
                           •Cgig_XM_011455796.3 | OG4 |
                           •Ctel_gnl_WGS_AMQN_CAPTEDRAFT_mRNA106454 | OG4 |
                           <sub>s</sub>Acagra_model.g27006.t1 | OG4 |
                        <sup>100</sup> Acagra_model.g27006.t1.1.5d3b8bd8 | OG4 |
         55
                              -Chem_TCONS_00006049 | OG4 |
                        •Nemnom_g4333.t1 | OG4 |
                100
                    <sup>100</sup><sup>1</sup>-Rhoesc_Res_013138-T1 | OG4 |
              82
                             •Morvir_scaffold232.g9.t1 | OG4 |
                                 TrH2 TrispH2 000820-RA | OG4 |
                 82
                              <sup>100</sup> Tadh TriadT60260 | OG4 |
                                  •HoiH11 mRNA5128 | OG4 |
                          100
                                      -HoiH23 PIH23 005047-RA | OG4 |
                             100
                                  <sup>100</sup>1•HoiH06_mRNA624 | OG4 |
           82
                                     Hhon_g06365.t1 | OG4 |
                                   <sup>100</sup> HoiH04_mRNA1828 | OG4 |
                              •Dgig_XM_028543731.1 | OG4 |
                             -Xesp_020452-T1 | OG4 |
                               •Exapal_XM_021057676.2 | OG4 |
              100
                     100
                             Nvec_v1g206544 | OG4 |
                               •Spis_XP_022796150_1 | OG4 |
                  100
                           <sup>100</sup>-Pocdam_XM_027196145.1 | OG4 |
                               •Fspp_ffun1.m4.31005.m1 | OG4 |
                                •Gasp_gasp1.m3.2302.m1 | OG4 |
       46
                                   •Fspp_ffun1.m4.6552.m1 | OG4 |
                                     Gfas_gfas1.m1.5614.m1 | OG4 |
                                       Amil_Amillepora05228-RA | OG4 |
                                    <sup>100</sup> -Adig_XM_015924815.1 | OG4 |
                     ·Clacor_Ccor_scaffold9730_01 | OG4 |
                           •Gracom Gcom C550874 01 | OG4 |
                             -Scil_scict004531.1 | OG4 |
               100
                             Leuniv Lniv C810768 01 | OG4 |
                  100
                        Lcom_lcpid98235 | OG4 |
                           Lcom_lcpid70994 | OG4 |
            100
                        1001-Lcom_lcpid73846 | OG4 |
                      ·Clacor Ccor scaffold15214 01 | OG4 |
                        Leuniv Lniv scaffold24617 01 | OG4 |
               100
                             •Gracom_Gcom_C551378_01 | OG4 |
                              Lcom_lcpid186733 | OG4 |
                       100
                  100
                               Scil scict007197.3 | OG4 |
                           100
                              991Lcom_lcpid254942 | OG4 |
                     98
                           Lcom_lcpid104714 | OG4 |
          82
                            Lcom_lcpid81173 | OG4 |
                              Lcom_lcpid82500 | OG4 |
                             69 Lcom_lcpid114087 | OG4 |
                         •Codhol_EP00042_Codosiga_hollandica_P039896 | OG4 |
                        Salkve EP00050 Salpingoeca kvevrii P005756 | OG4 |
                              Lcom_lcpid182299 | OG4 |
                        Salmac_EP00052_Salpingoeca_macrocollata_P030484 | OG4 |
                         Mylflu EP00047 Mylnosiga fluctuans P001504 | OG4 |
                 98
            83
                           Salpun_EP00053_Salpingoeca_punica_P020415 | OG4 |
                         Salinf EP00049 Salpingoeca infusionum P017191 | OG4 |
                             •Microa EP00043 Microstomoeca roanoka P029542 | OG4 |
               73
                   100
                        1001-Sros_EGD80680 | OG4 |
                              Mbre EDQ92260 | OG4 |
                                •Chofle_EP00730_Choanoeca_flexa_P005602 | OG4 |
                                •Choper EP00045 Choanoeca perplexa P002823 | OG4 |
                           Salurc_EP00051_Salpingoeca_urceolata_P026616 | OG4 |
                           Saldol EP00054 Salpingoeca dolichothecata P032470 | OG4 |
                                                  •Plespi_Pspi_scaffold19573_01 | OG4 |
                   26
                              Lcom | lcpid132119 | OG4 |
                          100 Lcom | lcpid207939 | OG4 |
                                       Didcos_EP00039_Didymoeca_costata_P017985 | OG4 |
                                                     Didcos EP00039 Didymoeca costata P032275 | OG4 |
                                    Diagra_EP00040_Diaphanoeca_grandis_P038383 | OG4 |
                          91
                                     Stedip EP00041 Stephanoeca diplocostata P016241 | OG4 |
                                        Acaspe EP00035 Acanthoeca spectabilis P019811 | OG4 |
                              100
                                       Helnan EP00037 Helgoeca nana P006498 | OG4 |
0.416667
```