

```
•Chem_TCONS_00047018 | OG0 |
•Morvir scaffold171.g16.t1 | OG0 |
•Sanmal_Sma_010648-T1 | OG0 |
    -Rhoesc Res 000523-T1 | OG0 |
100 Nemnom_g2485.t1 | OG0 |
    Aaur_scaffold380.g10.t1 | OG0 |
 <sup>100</sup>l-Aaur_scaffold380.g9.t1 | OG0 |
                                   Lcom | lcpid232008 | OG0 |
 •Exapal XM 021051325.1 | OG0 |
 •Gfas gfas1.m1.14103.m1 | OG0 |
   Amil_Amillepora24409-RA | OG0 |
 100 Adia XM 015914745.1 | OG0 |
   -Gasp gasp1.m3.19373.m1 | OG0 |
100 Fspp ffun1.m4.7079.m1 | OG0 |
   •Pocdam XM 027191668.1 | OG0 |
      -Spis_XP_022807025_1 | OG0 |
   <sup>100</sup>-Spis Spis 16562_1 | OG0 |
 TrH2 TrispH2 001917-RA | OG1 |
 -HoiH11 mRNA2586 | OG1 |
      <sub>"</sub>HoiH23_PIH23_004685-RA | OG1 |
    <sup>[100]</sup>-HoiH06 mRNA13319 | OG1 |
      Hhon g11411.t1 | OG1 |
    100 HoiH04 mRNA16253 | OG1 |
   -Bralan BLAG06001047 1 | OG1 |
<sup>100</sup> Bralan_BLAG06101479_3 | OG1 |
   •Hsap ENST00000296543 | OG1 |
    •Hsap ENST00000379406 | OG1 |
    •Spur_XM_030981096.1 | OG1 |
   •Skow XM 002740705.2 | OG1 |
       •Ctel_gnl_WGS_AMQN_CAPTEDRAFT_mRNA222736 | OG1 |
       Acagra model.g13202.t1 | OG1 |
         Cgig XM 011443905.3 | OG1 |
      Cscu XM 023359679.1 | OG1 |
   1001-Cscu XM_023355692.1 | OG1
           ·Tcas_TC008190_001 | OG1 |
           •Dpul mRNA11072 | OG1 |
       •Plajan Pjan C569574 01 | OG1 |
         Opea_EP00118_Oscarella_pearsei_P002812 | OG1 |
      100 Ocar g8251 | OG1 |
          Clacor_Ccor_C510033_01 | OG1 |
           Clacor Ccor scaffold9140 01 | OG1 |
            •Lcom lcpid33910 | OG1 |
              •Gracom_Gcom_C560798_01 | OG1 |
             •Leuniv_Lniv_C815354_01 | OG1 |
        •Plespi Pspi scaffold20711 01 | OG1 |
         Xestes_maker-XT_scaffold4113-snap-gene-0.44-mRNA-1 | OG1 |
            •Halamb_c55193_g1_i1m.40231 | OG1 |
                            -Aque_Aqu2.1.03166_001 | OG1 |
          <sup>100</sup> Aque Aqu2.1.26773_001 | OG1 |
            •Tetwil_g10674.t1 | OG1 |
           Stycar_maker-SC_scaffold543-augustus-gene-0.4-mRNA-1 | OG1 |
           •Emue_Em0022g551a.t1 | OG1 |
            Spolac_c103171_g1_i1_m.32808c103171-g1 | OG1 |
          <sup>100</sup> Spolac c103171 g1 i2 m.32811c103171-g1 | OG1 |
              •Mylflu_EP00047_Mylnosiga_fluctuans_P004422 | OG1 |
               •Salkve_EP00050_Salpingoeca_kvevrii_P011539                                  | OG1 |
                 Salurc EP00051 Salpingoeca urceolata P005792 | OG1 |
                           •Salurc_EP00051_Salpingoeca_urceolata_P005790 | OG1 |
                 Salurc_EP00051_Salpingoeca_urceolata_P005791 | OG1 |
                 Didcos_EP00039_Didymoeca_costata_P007273 | OG1 |
                     Diagra_EP00040_Diaphanoeca_grandis_P039367 | OG1 |
                      Stedip EP00041 Stephanoeca diplocostata P025084 | OG1 |
                          Acaspe_EP00035_Acanthoeca_spectabilis_P034225 | OG1 |
                           •Helnan_EP00037_Helgoeca_nana_P037530 | OG1 |
                  Salmac_EP00052_Salpingoeca_macrocollata_P007789 | OG1 |
                    -Salpun_EP00053_Salpingoeca_punica_P018371 | OG1 |
               Lcom | lcpid249330 | OG1 |
                                   Codhol EP00042 Codosiga hollandica P030310 | OG1 |
                                         •Codhol_EP00042_Codosiga_hollandica_P030311 | OG1 |
                                        •Codhol_EP00042_Codosiga_hollandica_P029288 | OG1 |
                                     -Codhol EP00042 Codosiga hollandica P029289 | OG1 |
                                 69 Codhol_EP00042_Codosiga_hollandica_P029290 | OG1 |
                  Saldol_EP00054_Salpingoeca_dolichothecata_P024642 | OG1 |
               100<sup>1</sup>-Saldol _EP00054_Salpingoeca_dolichothecata_P024643 | OG1 |
                                •Mbre_EDQ92792 | OG1 |
                                 •Chofle_EP00730_Choanoeca_flexa_P019258 | OG1 |
                          100
                                Choper_EP00045_Choanoeca_perplexa_P016864 | OG1 |
                              Salinf EP00049 Salpingoeca infusionum P008761 | OG1 |
                             •Microa EP00043 Microstomoeca roanoka P018675 | OG1 |
                                •Sros_EGD73672 | OG1 |
                                  •Microa_EP00043_Microstomoeca_roanoka_P018664 | OG1 |
              •Eupdun_Edun_sb10676496 | OG1 |
              Eupdun Edun sb10676495 | OG1 |
            67 - Eupdun_Edun_sb10676499 | OG1 |
            Eupdun_Edun_sb10676494 | OG1 |
              Eupdun_Edun_sb10676498 | OG1 |
                Eupdun_Edun_sb10676497 | OG1 |
                  Eupdun_Edun_sb10676500 | OG1 |
                    _•Eupdun_Edun_sb10676502 | OG1 |
                   •Lampan_Lpan_12487_01 | OG1 |
                 Coemet Cmet C605922 01 | OG1 |
                  Vmul SimC404998 | OG1 |
                  Mertsp Mesp sb587482 | OG1 |
                    Mertsp_Mesp_sb587485 | OG1 |
                      Mertsp_Mesp_sb587483 | OG1 |
                    451-Mertsp_Mesp_sb587484 | OG1 |
                  Bolinf Binf sb1269062 | OG1 |
                    Bolinf_Binf_sb1269066 | OG1 |
                      Bolinf_Binf_sb1269064 | OG1 |
                        Bolinf Binf sb1269063 | OG1 |
                      95 Bolinf Binf sb1269065 | OG1 |
                     Beraby_Baby_sb348988 | OG1 |
                  <sup>100</sup> Beraby_Baby_sb348989 | OG1 |
                     Bolinf Binf sb1227545 | OG1 |
                         Mlei_ML1207.g28.i1 | OG1 |
                      <sup>100</sup>Vmul_sbMO427334 | OG1 |
                         *Bolinf Binf sb1255992 | OG1 |
                           Bolinf_Binf_sb1255991 | OG1
                         <sup>59</sup> Mertsp_Mesp_sb574469 | OG1 |
                       Drygla_Dgla_sb296066 | OG1 |
                     66<sup>1</sup>Drygla Dgla sb296067 | OG1 |
                       Drygla Dgla sb296068 | OG1 |
                     <sup>79</sup> Drygla_Dgla_sb296069 | OG1 |
                          •Pbac_sb2667411 | OG1 |
                           Horcal Hcv1.av93.c7.g385.i1 | OG1 |
                             -Pbac sb2667407 | OG1 |
                               Pbac sb2649233 | OG1 |
                             99<sup>1</sup>-Pbac sb2667408 | OG1 |
```