

```
Eupdun Edun sb10627861 | OG0 |
<sup>100</sup> Eupdun Edun sb10627862 | OG0 |
                                Vmul SimC386990 | OG0 |
                         •Coemet_Cmet_C592313_01 | OG0 |
                           Coeast Cast sb754605 | OG0 |
                        <sup>1001</sup>•Coeast Cast_sb754606 | OG0 |
                       Drygla Dgla sb283946 | OG0 |
                    <sup>100</sup> Drygla_Dgla_sb283945 | OG0 |
                      Lampan Lpan 7715 01 | OG0 |
                               •Bolinf Binf sb1227190 | OG0 |
                          Mertsp Mesp sb557335 | OG0 |
                         -Pbac_sb2658681 | OG0 |
                           Pbac_sb2657701 | OG0 |
                             Horcal_Hcv1.av93.c5.g183.i1 | OG0 |
                           <sup>74]</sup>Horcal Hcv1.av93.c5.g183.i2 | OG0 |
       Coemet Cmet scaffold17459 01 | OG0 |
          Vmul sbMO436774 | OG0 |
           -Vmul Simscaffold14341 01 | OG0 |
         ·Drygla_Dgla_sb294392 | OG0 |
             •Bolinf Binf sb1237190 | OG0 |
              <sup>100</sup> Mlei ML2617.g1.i1 | OG0 |
              •Pbac_sb2658680 | OG0 |
            <sup>65</sup> Horcal_Hcv1.av93.c5.g182.i1 | OG0 |
              Pbac sb2637553 | OG0 |
            <sup>991</sup>-Pbac sb2637983 | OG0 |
            Beraby Baby sb325370 | OG0 |
               •Lampan_Lpan_13239_01 | OG0 |
            •Mertsp_Mesp_sb587960 | OG0 |
              Bolinf Binf sb1257243 | OG0 |
               Mertsp Mesp sb587963 | OG0 |
                Mertsp_Mesp_sb587962 | OG0 |
                  Mertsp Mesp sb587964 | OG0 |
                   Mertsp Mesp sb587959 | OG0 |
                  <sup>11</sup>Mertsp Mesp sb587961 | OG0 |
            Bolinf Binf sb1257244 | OG0 |
              Mertsp_Mesp_sb587966 | OG0 |
               Mertsp Mesp sb587969 | OG0 |
                Mertsp_Mesp_sb587967 | OG0 |
                 Mertsp Mesp sb587970 | OG0 |
                  Mertsp Mesp sb587965 | OG0 |
                  <sup>1</sup> Mertsp_Mesp_sb587968 | OG0 |
                 Salurc_EP00051_Salpingoeca_urceolata_P033345 | OG0 |
                  Didcos_EP00039_Didymoeca_costata_P019020 | OG0 |
                        Diagra EP00040 Diaphanoeca grandis P029430 | OG0 |
                         Acaspe EP00035 Acanthoeca spectabilis P020874 | OG0 |
                         -Helnan_EP00037_Helgoeca_nana_P002859 | OG0 |
                       Stedip_EP00041_Stephanoeca_diplocostata_P002173 | OG0 |
                          •Stedip_EP00041_Stephanoeca_diplocostata_P002174 | OG0 |
                 Salmac EP00052 Salpingoeca macrocollata P000310 | OG0 |
                         Salmac EP00052 Salpingoeca macrocollata P036089 | OG0 |
                     99<sup>1</sup>Salmac_EP00052_Salpingoeca_macrocollata_P034697 | OG0 |
                 -Salpun_EP00053_Salpingoeca_punica_P018107 | OG0 |
                     ·Saldol_EP00054_Salpingoeca_dolichothecata_P033264 | OG0 |
                    Codhol EP00042 Codosiga hollandica P048217 | OG0 |
                       ·Codhol EP00042 Codosiga hollandica P048221 | OG0 |
                       Salinf_EP00049_Salpingoeca_infusionum_P018874 | OG0 |
                  •Microa_EP00043_Microstomoeca_roanoka_P008808 | OG0 |
                 •Sros_EGD81452 | OG0 |
               Mbre EDQ91806 | OG0 |
                Choper EP00045 Choanoeca perplexa P004167 | OG0 |
                 Chofle EP00730 Choanoeca flexa P019475 | OG0 |
               OOU—Chofle_EP00730_Choanoeca_flexa_P019477 | OG0 |
          •Emue_Em0017g63a.t1 | OG0 |
      <sup>100</sup> -Spolac_c101697_g1_i1_m.26452c101697-g1 | OG0 |
               -Spolac c99202 g1 i1 m.19094c101697-g1 | OG0 |
            <sup>100</sup> Spolac c99202 g1 i2 m.19095c101697-g1 | OG0 |
              •Spolac_c97964_g1_i1_m.16102c97964-g1 | OG0 |
               •Emue_Em0017g60a.t1 | OG0 |
               •Emue_Em0004g1055a.t1 | OG0 |
               -Spolac_c97964_g1_i1_m.16101c97964-g1 | OG0 |
        Plespi Pspi scaffold19328 01 | OG0 |
     <sup>100</sup> Plespi_Pspi_scaffold19329_01 | OG0 |
         •Tetwil_g10969.t1 | OG0 |
             Aque_Aqu2.1.44096_001 | OG0 |
              •Xestes_maker-XT_scaffold2366-snap-gene-0.14-mRNA-1 | OG0 |
             -Halamb_c51402_g1_i2m.30523 | OG0 |
                Stycar_snap_masked-SC_scaffold560-processed-gene-0.3-mRNA-1 | OG0 |
            | Stycar_maker-SC_scaffold5741-snap-gene-0.151-mRNA-1
                 Stycar_maker-SC_scaffold5741-snap-gene-0.154-mRNA-1 | OG0 |
              <sup>1001</sup>-Stycar maker-SC_scaffold96036-snap-gene-0.11-mRNA-1 | OG0 |
                   Stycar_maker-SC_scaffold5741-snap-gene-0.153-mRNA-1 | OG0 |
                        -Stycar_snap_masked-SC_scaffold560-processed-gene-0.2-mRNA-1 | OG0 |
      <sub>f</sub>HoiH23_PIH23_000213-RA | OG0 |
           Hhon g04341.t1 | OG0 |
             HoiH04 mRNA538 | OG0 |
             -HoiH06_mRNA1115 | OG0 |
            HoiH11_mRNA2810 | OG0 |
              -TrH2_TrispH2_001139-RA | OG0 |
           <sup>100</sup> Tadh_TriadT25969 | OG0 |
              -Bralan_BLAG05000635_1 | OG0 |
                   •Hsap_ENST00000319017 | OG0 |
                 •Skow_XM_002742076.2 | OG0 |
             Cscu XM 023371827.1 | OG0 |
                Acagra model.g8559.t1 | OG0 |
                •Cgig_XM_011449504.3 | OG0 |
               •Dpul_mRNA28699 | OG0 |
                   •Lcom_lcpid119623 | OG0 |
                     •Tcas_TC004690_001 | OG0 |
              •Spur XM 782368.5 | OG0 |
              •Clacor_Ccor_scaffold13486_01 | OG0 |
              •Gracom_Gcom_scaffold16536_01 | OG0 |
                 Leuniv_Lniv_scaffold10681_01 | OG0 |
                    Lcom | lcpid100301 | OG0 |
                     •Scil scict004980.1 | OG0 |
                  •Dgig_XM_028541984.1 | OG0 |
                -Dgig_XM_028541985.1 | OG0 |
            100<sup>1</sup>-Xesp_016021-T1 | OG0 |
                  Plajan Pjan scaffold5042 01 | OG0 |
                              -Plajan_Pjan_scaffold5041_01 | OG0 |
                  Opea_EP00118_Oscarella_pearsei_P027654 | OG0 |
               <sup>100</sup> Ocar_g3692 | OG0 |
                 •Morvir_scaffold7.g154.t1 | OG0 |
                    •Chem_TCONS_00014234 | OG0 |
                      Hvul g21094 1 | OG0 |
                  -Nemnom_g7363.t1 | OG0 |
                     •Rhoesc_Res_000381-T1 | OG0 |
                      <sub>_</sub>-Aaur_scaffold1032.g5.t1 | OG0 |
                        -Sanmal_Sma_010695-T1 | OG0 |
                  Exapal XM 021042421.2 | OG0 |
                  -Nvec_v1g242628 | OG0 |
                  •Fspp_ffun1.m4.29297.m1 | OG0 |
                    Gasp_gasp1.m3.827.m1 | OG0 |
                        <sub>_</sub>-Spis_XP_022801656_1 | OG0 |
                     <sup>100</sup>¹•Pocdam XM 027198997.1 | OG0 |
                        -Gfas_gfas1.m1.18678.m1 | OG0 |
                          Adig XM 015911873.1 | OG0 |
                        <sup>1</sup>00<sup>1</sup>-Amil Amillepora07261-RA | OG0 |
```