```
Diagra EP00040 Diaphanoeca grandis P006624 | OG0 |
                                                     •Acaspe EP00035_Acanthoeca_spectabilis_P013450 | OG0 |
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                                                 •Helnan_EP00037_Helgoeca_nana_P034829 | OG0 |
                                             Salurc EP00051 Salpingoeca urceolata P011984 | OG0 |
                                              Codhol EP00042 Codosiga hollandica P056369 | OG0 |
                                            Codhol EP00042 Codosiga hollandica P053986 | OG0 |
                             •Mbre EDQ91738 | OG1 |
                              •Choper EP00045 Choanoeca perplexa P015656 | OG1 |
           100
                               •Chofle EP00730 Choanoeca flexa_P006143 | OG1 |
   86
                                     Salinf EP00049 Salpingoeca infusionum P019426 | OG1 |
                       •Microa EP00043 Microstomoeca roanoka P023889 | OG1 |
       100
                              •Microa EP00043 Microstomoeca roanoka P024227 | OG1 |
               100
                         •Sros EGD72422 | OG1 |
                        Salkve_EP00050_Salpingoeca_kvevrii_P020678 | OG1 |
                  Lcom | lcpid253866 | OG1 |
                         Didcos EP00039 Didymoeca costata P019979 | OG1 |
        39
                          Diagra EP00040 Diaphanoeca grandis P029262 | OG1 |
                             Stedip EP00041 Stephanoeca diplocostata P002811 | OG1 |
                                 Stedip EP00041 Stephanoeca diplocostata_P010369 | OG1 |
                 58
                                   Helnan EP00037 Helgoeca nana P009751 | OG1 |
                                    Acaspe EP00035 Acanthoeca spectabilis P033313 | OG1 |
                                          Acaspe EP00035 Acanthoeca spectabilis P033312 | OG1 |
                                         •Helnan_EP00037_Helgoeca_nana_P009750 | OG1 |
                     •Mylflu_EP00047_Mylnosiga_fluctuans_P004562 | OG1 |
                  Salurc EP00051 Salpingoeca urceolata P033318 | OG1 |
      52
                     Codhol EP00042 Codosiga hollandica P040991 | OG1 |
                                     -Lcom_lcpid182178 | OG1 |
        60
                               Salpun_EP00053_Salpingoeca_punica_P016079 | OG1 |
                          | Salpun EP00053_Salpingoeca_punica_P016082 | OG1
          48
                             Salmac EP00052 Salpingoeca macrocollata P013173 | OG1 |
                  79
                               Salmac EP00052 Salpingoeca macrocollata P013174 | OG1

    Salmac EP00052 Salpingoeca macrocollata P013172 | OG1 |

                                Saldol_EP00054_Salpingoeca_dolichothecata_P020736 | OG1 |
                         | Saldol EP00054_Salpingoeca_dolichothecata_P020737 | OG1
                                    Didcos EP00039 Didymoeca costata P019915 | OG1 |
                             Codhol EP00042 Codosiga hollandica P040990 | OG1 |
                                 Codhol EP00042 Codosiga hollandica P042028 | OG1 |
                           96
                                                      -Codhol_EP00042_Codosiga_hollandica_P042027 | OG1 |
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                                    991Codhol EP00042_Codosiga_hollandica_P008626 | OG1 |
                               •Coemet Cmet scaffold22634 01 | OG1 |
                               -Mlei ML0520.g3.i1 | OG1 |
                              <sup>85</sup>Ū-Lampan Lpan_13907_01 | OG1 |
                        100
                               •Pbac_sb2664926 | OG1 |
                                Pbac_sb2664927 | OG1 |
                                  Horcal_Hcv1.av93.c9.g713.i1 | OG1 |
                                          -Pbac sb2664928 | OG1 |
                                                         -Tcas TC012008 001 | OG1 |
                                      Xestes_augustus_masked-XT_scaffold3776-processed-gene-0.0-mRNA-1 | OG1 |
                                       •Aque_Aqu2.1.24032_001 | OG1 |
                                93
                    91
                                       •Halamb c50688 g2 i1m.28893 | OG1 |
                             100
                                    •Halamb c43022 g1 i2mm.1211 | OG1 |
                                        Xestes maker-XT_scaffold3355-snap-gene-0.6-mRNA-1 | OG1 |
                                         Aque_Aqu2.1.07438_001 | OG1 |
                                       <sup>1001</sup>Aque _Aqu2.1.11623_001 | OG1 |
                                    Stycar snap masked-SC scaffold3823-processed-gene-0.12-mRNA-1 | OG1 |
                                 <sup>100</sup>L-Stycar maker-SC scaffold139011-augustus-gene-0.3-mRNA-1 | OG1 |
                               95
                                      •Tetwil g22402.t2 | OG1 |
                                          Stycar_augustus_masked-SC_scaffold35762-processed-gene-0.0-mRNA-1 | OG1 |
                             99
                                   •Emue_Em0011g1183a.t1 | OG1 |
                                        •Spolac_c103823_g1_i1_m.36400c103823-g1 | OG1 |
                                       Spolac c103823 g1 i2 m.36403c103823-g1 | OG1 |
                                     89 Spolac c103823 g1 i1 m.36399c103823-g1 | OG1 |
                                   75
                            66
                                     <sup>[100]</sup>-Tadh_TriadT50449 | OG1 |
                                        •HoiH11 mRNA4960 | OG1 |
                                  100
                                             •HoiH06 mRNA11580 | OG1 |
                                         <sup>100</sup> HoiH23_PIH23_001517-RA | OG1 |
                                            <sub>!</sub>Hhon_g10127.t1 | OG1 |
                                          <sup>100</sup> HoiH04_mRNA2739 | OG1 |
                                       <sub>[</sub>Opea_EP00118_Oscarella_pearsei_P005101 | OG1 |
                                    <sup>100</sup><sup>1</sup> Ocar_g4842 | OG1 |
                                      <sub>r</sub>Plajan_Pjan_scaffold23177_01 | OG1 |
                                    <sup>100</sup>lPlajan_Pjan_scaffold23178_01 | OG1 |
                          49
                              78
                                         •Clacor_Ccor_scaffold15230_01 | OG1 |
                                           •Gracom_Gcom_C560868_01 | OG1 |
                                 100
                                               -Lcom lcpid28054 | OG1 |
                                      100
                                           <sup>98</sup>└-Leuniv_Lniv_scaffold8949_01 | OG1 |
                                              Scil_scict025602.1 | OG1 |
                                                   •Scil_scict023786.1 | OG1 |
                                         •Spur_XM_030995750.1 | OG1 |
                                        Spur_XM_030996347.1 | OG1 |
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                                        Spur_XM_030996468.1 | OG1
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                                            •Bralan_BLAG13000391_4 | OG1 |
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                                             -Acagra_model.g8193.t1 | OG1 |
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                                               •Tcas_TC001725_001 | OG1 |
                                               -•Dpul_mRNA4325 | OG1 |
                                           100 Dpul_mRNA25840 | OG1 |
                                      <sub>_</sub>-Dgig_XM_028548696.1 | OG1 |
                                   <sup>100</sup><sup>1</sup>-Xesp_000787-T1 | OG1 |
                                            •Morvir_scaffold33.g23.t1 | OG1 |
                                               -Hvul_g29640_1 | OG1 |
                                           <sup>100</sup><sup>1</sup>-Chem_TCONS_00061418 | OG1 |
                                 95
                                     100
                                            •Sanmal_Sma_011962-T1 | OG1 |
                                               -Aaur_scaffold72.g29.t3 | OG1 |
                                                 rRhoesc_Res_016333-T1 | OG1 |
                                              <sup>100</sup><sup>1</sup>-Nemnom_g3774.t1 | OG1 |
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                                             -Exapal_XM_028657122.1 | OG1 |
                                             •Exapal_XM_021036150.2 | OG1 |
                                             <sub>[</sub>•Amil_Amillepora25398-RA | OG1 |
                                          <sup>1001</sup>Adig_XM_015921009.1 | OG1 |
                                                  •Fspp ffun1.m4.11741.m1 | OG1 |
                                                •Gasp_gasp1.m3.9532.m1 | OG1 |
                                                 <sub>|</sub>Spis_XP_022783034_1 | OG1 |
                                              <sup>100</sup> Pocdam XM 027198313.1 | OG1 |
                                                  -Fspp_ffun1.m4.11733.m1 | OG1 |
                                              <sup>81]</sup>Gfas_gfas1.m1.23346.m1 | OG1 |
0.416667
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