```
•Emue_Em0013g714a.t1 | OG0 |
                          Stycar snap masked-SC scaffold5160-processed-gene-0.25-mRNA-1 | OG0 |
                            •Tetwil g23238.t2 | OG0 |
             100
                         Aque_Aqu2.1.40621_001 | OG0 |
                            •Halamb c42115 g1 i1m.14560 | OG0 |
                 95
                            •Xestes augustus masked-XT scaffold105391-processed-gene-0.1-mRNA-1 | OG0 |
                    Tool Xestes_maker-XT_scaffold872-augustus-gene-0.18-mRNA-1 | OG0 |
   67
                          Opea_EP00118_Oscarella_pearsei_P004882 | OG0 |
                        •Plajan_Pjan_C551473_01 | OG0 |
                                 •Clacor Ccor scaffold8216_01 | OG0 |
        99
                                 Clacor Ccor scaffold9012 01 | OG0 |
                             <sup>100</sup> Clacor_Ccor_scaffold9013_01 | OG0 |
                98
                                                     •Gracom_Gcom_scaffold4416_01 | OG0 |
                                  ·Gracom_Gcom_scaffold4226_01 | OG0 |
                  60
                                                             •Scil scict017101.1 | OG0 |
                                  Leuniv Lniv scaffold23565 01 | OG0 |
                       86
                                        •Scil_scict001601.2 | OG0 |
 98
                           98
                                     Lcom_lcpid64678 | OG0 |
                             98
                                       Lcom_lcpid73800 | OG0 |
                                         -Lcom | lcpid71534 | OG0 |
                                100
                                     Lcom | lcpid88611 | OG0 |
                                       Lcom_lcpid100716 | OG0 |
                                         •Lcom_lcpid97573 | OG0 |
                                   •Hsap_ENST00000380871 | OG0 |
                                         •Morvir_scaffold477.g8.t1 | OG0 |
          61
                                      •Sanmal Sma_026504-T1 | OG0 |
                    100
                                      •Nemnom_g2105.t1 | OG0 |
                                 <sup>100</sup><sup>1</sup>-Rhoesc_Res_001049-T1 | OG0 |
      100
                •Tcas TC012743 001 | OG0 |
                         •Acagra_model.g1596.t1 | OG0 |
                             ·Cscu_XM_023361107.1 | OG0 |
               72
                    79
                                    •Cgig XM 011414579.3 | OG0 |
                            Bralan_BLAG03001042_1 | OG0 |
                              Hsap ENST00000382438 | OG0 |
                   79
                                    •Skow NM 001165004.1 | OG0 |
                          58
                                        •Spur_XM_779642.5 | OG0 |
                     45
                                             •Dgig XM 028547334.1 | OG0 |
                        47
                                   100
                                               •Xesp_013038-T1 | OG0 |
                                         Exapal XM 021044213.2 | OG0 |
                           86
                                      Nvec v1g208034 | OG0 |
                                         Amil_Amillepora06232-RA | OG0 |
                              100
                                      <sup>100</sup> Adig _XM_015915185.1 | OG0 |
                                            •Spis_XP_022782914_1 | OG0 |
                                   100
                                        <sup>[100]</sup>•Pocdam_XM_027185775.1 | OG0 |
                                          Fspp ffun1.m4.4461.m1 | OG0 |
                                         •Hvul_g31954_1 | OG1 |
                             -Chem_TCONS_00016211 | OG1 |
                          -Morvir scaffold11.g115.t1 | OG1 |
             100
                                        •Sanmal Sma_008525-T1 | OG1 |
                  99
                            •Nemnom_g13472.t1 | OG1 |
                        <sup>100</sup> -Rhoesc_Res_003043-T1 | OG1 |
     98
                   -Xesp_013044-T1 | OG1 |
                <sup>100</sup> Dgig_XM_028547544.1 | OG1 |
                  Exapal XM 021044212.2 | OG1 |
         99
                    •Nvec_v1g208035 | OG1 |
             96
                     -Gasp_gasp1.m3.679.m1 | OG1 |
               55
                          Spis_XP_022782912_1 | OG1 |
                       <sup>[100]</sup>Pocdam_XM_027185774.1 | OG1 |
                         Fspp ffun1.m4.4460.m1 | OG1 |
                           -Gfas_gfas1.m1.19176.m1 | OG1 |
                              •Amii_Amiiieporau6234-RA | OG1 |
                           <sup>100</sup> Adig_XM_015915184.1 | OG1 |
                                  •Dpul mRNA26167 | OG2 |
                                      •Tcas TC011745 001 | OG2 |
            52
                      •Spur_XM_778030.4 | OG2 |
                  •Skow_XM_006815396.1 | OG2 |
                   -Bralan_BLAG03001041_2 | OG2 |
     52
         90
                           -Hsap ENST00000325017 | OG2 |
           99
                          •Hsap ENST00000329198 | OG2 |
                         Hsap ENST00000344586 | OG2 |
       83
                          •Ctel_gnl_WGS_AMQN_CAPTEDRAFT_mRNA170007 | OG2 |
                       ·Ctel_gnl_WGS_AMQN_CAPTEDRAFT_mRNA220898 | OG2 |
                       Cscu XM 023361114.1 | OG2 |
         95
                      Acagra model.g1144.t1 | OG2 |
                         Cgig XM 011456691.3 | OG2 |
                                <sub>"</sub>HoiH11_mRNA4950 | OG3 |
                                       rTadh_TriadT9507 | OG3 |
                             100
                                     <sup>98</sup> TrH2_TrispH2_003382-RA | OG3 |
                                       •HoiH06 mRNA11553 | OG3 |
                                      HoiH23_PIH23_010042-RA | OG3 |
                                      Hhon_g07292.t1 | OG3 |
   52
         82
                                    98 HoiH04 mRNA8177 | OG3 |
                                       •Cscu_XM_023361927.1 | OG3 |
                            •Ctel gnl WGS AMQN CAPTEDRAFT mRNA172338 | OG3 |
                       Cgig_XM_011453501.3 | OG3 |
                     Acagra_model.g2292.t1 | OG3 |
                            •Ctel gnl WGS AMQN CAPTEDRAFT mRNA40416 | OG3 |
                          Bralan BLAG04001574 1 | OG3 |
               33
                           Spur NM 214635.1 | OG3 |
                          •Skow_NM_001164910.1 | OG3 |
                            •Hsap_ENST00000354822 | OG3 |
                 48
                              Hsap ENST00000351817 | OG3 |
                            •Tcas TC008996 001 | OG3 |
                             •Cscu XM 023376262.1 | OG3 |
                           -Dpul_mRNA2105 | OG3 |
                       •Dpul_mRNA6100 | OG4 |
     93
                88
                       •Tcas_TC007014_001 | OG4 |
                       Cscu XM 023368090.1 | OG4 |
          100
                         Cscu XM 023363193.1 | OG4 |
             86
                           •Ctel_gnl_WGS_AMQN_CAPTEDRAFT_mRNA221803 | OG4 |
                         •Ctel_gnl_WGS_AMQN_CAPTEDRAFT_mRNA70572 | OG4 |
                            Cgig XM 011439089.3 | OG4 |
                          •Acagra_model.g2291.t1 | OG4 |
                              •Spur NM 001129811.2 | OG4 |
                   58
                        100
                              Skow_NM_001164932.1 | OG4 |
                               •Bralan_BLAG04001575_1 | OG4 |
                                Hsap ENST00000377142 | OG4 |
                                          •Hsap ENST00000258829 | OG4 |
                                   <sub>-</sub>-HoiH06 mRNA3929 | OG4 |
                                    -HoiH04_mRNA13330 | OG4 |
       86
                                   <sub>e</sub>HoiH23_PIH23_010043-RA | OG4 |
                                      TrH2 TrispH2 003383-RA | OG4 |
                                   <sup>100</sup><sup>1</sup>Tadh_TriadT9561 | OG4 |
                                       •Dgig XM 028537572.1 | OG4 |
                               100
                                               Xesp_021545-T1 | OG4 |
                   76
                                       Dgig XM 028553282.1 | OG4 |
                        100
                                            •Xesp_021495-T1 | OG4 |
                                                   •Morvir scaffold273.g2.t1 | OG4 |
                                          •Morvir scaffold83.g2.t1 | OG4 |
              60
                    78
                                      Nemnom_g19277.t1 | OG4 |
                                          •Sanmal_Sma_023401-T1 | OG4 |
                                                              -Chem_TCONS_00013206 | OG4 |
          80
                 69
                          81
                                                            •Lcom_lcpid91511 | OG4 |
                                           •Chem TCONS 00069083 | OG4 |
                                                •Morvir_scaffold46.g33.t1 | OG4 |
                   81
                                                           -Chem_TCONS_00070249 | OG4 |
                                     100
                                                       Aaur_scaffold2956.g1.t1 | OG4 |
                                         85
                                                             •Nemnom_g19279.t1 | OG4 |
                                              100
                     79
                                                   100
                                                          •Rhoesc Res 004687-T1 | OG4 |
                                        •Nvec_v1g68616 | OG4 |
                               100
                                             •Exapal XM 021051233.2 | OG4 |
                                                            •Xesp_022051-T1 | OG4 |
                          85
                                            Amil Amillepora26578-RA | OG4 |
            64
                               84
                                         <sup>100</sup> Adig XM 015905817.1 | OG4 |
                                             •Gfas gfas1.m1.776.m1 | OG4 |
                                      99
                                                   •Spis XP 022794616 1 | OG4 |
                                         98
                                               <sup>100</sup> Pocdam XM_027183109.1 | OG4 |
                                                 --Fspp ffun1.m4.14105.m1 | OG4 |
                                               <sup>47</sup><sup>1</sup>—Gasp_gasp1.m3.4129.m1 | OG4 |
                                 Dgig_XM_028537344.1 | OG4 |
                                   •Xesp 016908-T1 | OG4 |
                          100
                               <sup>100</sup> Xesp 021558-T1 | OG4 |
                                    •Nvec v1g192469 | OG4 |
                      92
                                         Exapal XM 021051226.2 | OG4 |
                                      -Spis_XP_022794643_1 | OG4 |
                                   <sup>99</sup>•Pocdam_XM_027183114.1 | OG4 |
                   95
                                100
                                        Amil Amillepora26577-RA | OG4 |
                                     <sup>100</sup> Adig_XM_015905819.1 | OG4 |
              92
                                      •Exapal XM 021051225.2 | OG4 |
                     69
                                98
                                         •Nvec_v1g127828 | OG4 |
                                      Amil_Amillepora26581-RA | OG4 |
                           100
                                   <sup>1001</sup>Adig _XM_015905823.1 | OG4 |
                                      •Gfas_gfas1.m1.775.m1 | OG4 |
                                100
                                           •Fspp_ffun1.m4.14112.m1 | OG4 |
                                          -Gasp_gasp1.m3.4134.m1 | OG4 |
                 96
                                           Spis_XP_022794603_1 | OG4 |
                                        <sup>100</sup> Pocdam XM_027183103.1 | OG4 |
                           ⊢•Nvec v1g127891 | OG4 |
                        <sup>100</sup><sup>1</sup>-Exapal_XM_021051229.2 | OG4 |
                                •Gasp_gasp1.m3.4132.m1 | OG4 |
                     100
                                  <sub>!</sub>-Spis_XP_022794604_1 | OG4 |
                               <sup>1001</sup>•Pocdam XM_027183104.1 | OG4 |
                                •Gfas gfas1.m1.773.m1 | OG4 |
                                  Amil Amillepora26580-RA | OG4 |
                   98
                               <sup>1001</sup>-Adig_XM_015905827.1 | OG4 |
                                    •Nvec_v1g48313 | OG4 |
                              100
                                     •Exapal_XM_021051231.2 | OG4 |
                                     Gfas gfas1.m1.777.m1 | OG4 |
                           100
                                       Amil_Amillepora26579-RA | OG4 |
                                    <sup>100</sup> Adig_XM_015905829.1 | OG4 |
                              100
                                     •Fspp_ffun1.m4.14106.m1 | OG4 |
                                       •Gasp_gasp1.m3.4130.m1 | OG4 |
                                         <sub>]</sub>•Pocdam_XM_027183102.1 | OG4 |
                                      <sup>100</sup> Spis_XP_022794618_1 | OG4 |
0.416667
```