```
C01 KO_mgat1
                  C02 KO_mgat3/4A/4B/5 cosmc
                               C03 KO_mgat2
       C04 KI_st6gal1; KO_mgat4A/4B/5_st3gal4/6 •
                                                       G30 KO_mgat1
       C05 KI_st6gal1; KO_mgat4A/4B/5_st3gal4/6
                                                       G25 KO_mgat2
C06 KI_st6Gal1; KO_mgat4A/4B/5_st3gal4/6_B3gnt2
                                                       G34 KO fut8
                  C07 KO_B3gnt2_mgat4A/4B/5 •
                                                       G22 KI_st3gal6; KO_mgat4a/4b/5_st3gal4/6
                         CO8 KO mgat4A/4B/5 ~
                                                       G20 KO_mgat4A/4B/5_B3gnt2
                C09 KO_mgat4A/4B/5_st3gal4/6 -
                                                       G05 KO_mgat4A/4B/5
                                                       G21 KO_st3gal4/6_mgat4a/4b/5
                                                       G18 KO st3gal4/6
                                                       G04 KO_mgat5
                             C18 KO st3gal4/6 -
                                                       G03 KO_mgat4A/4B
                             C19 KO_st3gal4/6
                                                       G28 KO_mgat4B
                     C20 KO_mgat3/4A/5 cosmc
                                                       G06 KO_B4GalT1
                            C21 KO_mgat 5 KO
                                                       G07 KO_B4GalT2
          C22 KO_mgat4A/4B/5_st3gal4/6_cosmc
                                                       G08 KO B4GalT3
                           C23 KO_mgat4A/4B *
                                                       G01 WT
                              C24 KO_mgat4B 
                                                       G09 KO_B4GalT4
                                 C13 KO_fut8
                              C14 KO_B4galt3
                              C15 KO_B4galt1
                              C16 KO_B4galt2
                                     C00 WT
                              C17 KO_B4galt4
```