```
cardio-ukbb_CAD(negative control trait)_pos
cardio-ukbb_CAD(negative control trait)_neg
                                                                                                                                                                                                                                       Autoimmune_thyroid_Graves_disease_neg
Autoimmune_thyroid_Hashimotos_disease_neg
                                                                                                                                                                                                                                                                                                                                                                     alamante_T2D-European_pos
MAGIC_FI-EUR(negative control trait)_neg
                                                      Autoimmune_Ankylosing_spondylitis_pos
                                                                                                                                                                                                                                                                                                                                 Autoimmune_thyroid_Graves_disease_pos
diamante_T2D-European_pos
                                                                                                                  Autoimmune_Ankylosing_spondylitis_neg
diamante_T2D-European_neg
Autoimmune_Celiac_neg
childhood-bmi_7years_neg
                                                                                    childhood-bmi_3years_neg
                                                                                                                                                                                                                                                                                                MAGIC_HDA1c-EUR_pos
                                                                                                                                                                                                                                                                                                                                                                                                                        MAGIC_HbAlc-EUR_neg
```

CD8 on CD8br panel\_TBNK\_pos
CD4 on activated Treg panel\_Treg pos
on CD4+panel\_Maturation stages of T cell\_neg
CD8 on CD8br panel\_TBNK\_neg
CD4 on activated Treg\_panel\_Treg\_neg Autoimmune\_Inflammatory\_bowel\_disease\_pos Autoimmune\_thyroid\_Hashimotos\_disease\_pos CD25 on CD4 Treg\_panel\_Treg\_pos Autoimmune\_Inflammatory\_bowel\_disease\_neg MAGIC\_FI-EUR(negative control trait)\_pos CD45 on lymphocyte panel TBNK neg CD38 on IgD+ CD38dim panel B cell pos CD20 on memory B cell panel B cell neg CD19 on memory B cell panel B cell neg CD25 on CD24+ CD27+ panel B cell neg AFF-R on memory B cell panel B cell neg MAGIC\_FG-EUR\_neg MAGIC\_FG-EUR\_pos

seropositivity measuremer seropositivity measuremer CCR7 on naive CD4+\_panel\_Maturation stages of T cell\_neg urthritis; anti-citrullinated protein antibody seropositivity; rheumatoid factor on memory B cell\_panel\_B cell\_pos on memory B cell\_panel\_B cell\_pos antibody seropositivity; rheumatoid factor cell\_pos on memory B cell\_panel\_B cell\_pos on CD24+ CD27+\_panel\_B cell\_neg CD45 on lymphocyte panel TBNK pos CD28 on CD4 Treg panel Treg pos CD123 on plasmacytoid DC panel\_CDC pos naive CD4+ panel\_Maturation stages of T CD123 on plasmacytoid DC panel\_cDC\_neg CD25 on CD4 Treg\_panel\_Treg\_neg neg B cell \_\_3years\_pos \_\_7years\_pos Autoimmune\_Celiac\_pos CD38 on IgD+ CD38dim panel childhood-bmi\_ childhood-bmi BAFF-R CD19 rthritis; anti-citrullinated protein CD20 CCR7 on

BAFF-R

on CD4+\_panel\_Maturation stages of T cell\_pos \_Monocyte\_neg \_Monocyte\_pos CD28 on CD4 Treg\_panel\_Treg\_neg HLA DR on monocyte\_panel\_ HLA DR on monocyte\_panel\_