```
Autoimmune_thyroid_graves_disease_neg
Autoimmune_thyroid_Hashimotos_disease_neg
cardio-ukbb_CAD(negative control_trait)_neg
cardio-ukbb_CAD(negative control_trait)_neg
                                                                                                                                                                                                                                                                                                                                                       Autoimmune_thyroid_Graves_disease_pos
diamante_T2D-European_pos
Autoimmune_thyroid_Hashimotos_disease_p
                                                         Autoimmune_Ankylosing_spondylitis_pos
                                                                                                                             Autoimmune Ankylosing spondylitis neg
                                                                                                                                                                                                                                                                                          diamante_T2D-European_neg
MAGIC_HbAlc-EUR_pos
Autoimmune_Celiac_neg
childhood-bmi_7years_neg
                                                                                         childhood-bmi_3years_neg
```

disease_pos disease pos

MAGIC_FI-EUR(negative control_trait)_neg

Autoimmune_Inflammatory_bowel

on CD4+_panel_Maturation stages of T cell_pos CD4 on activated Treg_panel_Treg_neg CD28 on CD4 Treg_panel_Treg_neg MAGIC_HbAlc-EUR_neg HVEM

_disease_neg

MAGIC_FI-EUR(negative control trait)_pos

MAGIC_FG-EUR_neg MAGIC_FG-EUR_pos

Autoimmune_Inflammatory_bowel

seropositivity measuremer urthritis; anti-citrullinated protein antibody seropositivity; rheumatoid factor

CCR7 on naive CD4+ panel_Maturation stages of r cell_neg CD8 on CD8br_panel_TBNK_neg CD123 on plasmacytoid DC_panel_cDC_neg CD25 on CD4 Treg_panel_Treg_neg HLA DR on monocyte_panel_Monocyte_pos CD123 on plasmacytoid DC_panel_cDC_pos

CCR7 on naive CD4+ panel_Maturation stages of T cell_pos
CD19 on memory B cell_panel_B cell_pos
CD20 on memory B cell_panel_B cell_pos
CD45 on myphocyte_panel_TBNK_pos
CD45 on CD4 Treg_panel_Treg_pos
cD58 on CD4 Treg_panel_Treg_pos
cD58 on CD4+ CD27+ panel_B cell_pos
CD58 on CD5+ CD38dim_panel_B cell_pos B cell_pos childhood-bmi_3years_pos childhood-bmi_7years_pos CD19 on memory B cell_panel_B cell_neg BAFF-R on memory B cell_panel_B cell_neg Autoimmune_Celiac_pos HLA DR on monocyte panel Monocyte neg CD8 on CD8br panel TBNK pos CD4 on activated Treg panel Treg pos CD5 on CD4 Treg panel Treg pos CD38 on Igp4 CD38dim panel B cell pos CD20 on memory B cell panel B cell neg B cell_neg CD20 on memory B cell_panel_B cell_n CD45 on lymphocyte_panel_TBNK_neg on memory B cell_panel on CD24+ CD27+_panel_B BAFF-R

HVEM on CD4+_panel_Maturation stages of T cell_neg