```
tis; anti-citrullinated protein antibody seropositivity; rheumatoid factor seropositivity measurement mul
                                                                      MAGIC_FG-FUR_pos

MAGIC_FI-EUR(negative control trait)_pos

MAGIC_HbAlc-EUR_pos

Autoimmune thyroid Graves disease_pos
diamante_T2D-European_pos
                                          Autoimmune_Ankylosing_spondylitis_neg
```

```
diamante_T2D-European_neg
Autoimmune_Celiac_neg
cardio-ukbb_CAD(negative control trait)_pos
cardio-ukbb_CAD(negative control trait)_neg
                                                                                                                                                                                      all rheumatoid arthritis EAS_neg Autoimmune thyroid Graves_disease_neg Autoimmune thyroid Hashimotos_disease_neg childhood-bmi_7years_neg
                            disease pos
trait)_neg
MAGIC_FI-EUR(negative control
                            Autoimmune_Inflammatory_bowel
                                                     MAGIC_FG-EUR_neg
```

```
Autoimmune_thyroid_Hashimotos_disease_pos
Autoimmune_thyroid_Hashimotos_disease_pos
Autoimmune_Celiac_pos
Autoimmune_Celiac_pos
HIA DR on monocyte_panel_Monocyte_neg
on CD4+ panel_Maturation stages of T cell_pos
CD28 on CD4 Treg_panel_Treg_neg
                                                                                                                                                                                                                                                                                                                                                                                                  CD20 on memory b Cett. Pronce.

HIA DR on monocyte panel Monocyte poss CD8 on CD8br panel TBNK neg CD8 on CD8br panel TBNK pos CD2 on activated Treg panel Treg pos CD2 on CD4 Treg panel Treg pos CD2 on CD4 Treg panel Treg pos CD2 on CD4 Treg panel Treg pos CD3 on CD4 Treg panel Treg pos CD3 on CD4 Treg panel Treg pos CD3 on CD4 Treg panel B cell neg CD45 on Lymphocyte, Panel TBNK neg CD45 on Lymphocyte, Panel TBNK neg CD45 on Lymphocyte, Panel TBNK neg
                                                                                                                                                                                                                                                                                                                                                       CD4 on activated Treg panel_Treg_neg
D20 on memory B cell_panel_B cell_pos
Autoimmune Ankylosing spondylitis pos
childhood-bmi_3years_neg
all rheumatoid arthritis EAS_pos
                                                                                                                                                                                                                                                                                                                                                                                           CD20
                                                                                                                                                                                                                                                                                      HVEM
```

T cell_neg

HVEM

CCR7 on naive CD4+ panel Maturation stages of T cell_neg
CD123 on plasmacytoid DC_panel_cDC_neg
CD23 on CD4 Treq_panel_treq_neg
Childhood-bmi_3years_pos
childhood-bmi_7years_pos
childhood-bmi_7yea

cell pos

pos

CD45 on lymphocyte panel TBNK pos CD28 on CD4 Treg panel Treg pos 123 on plasmacytoid DC panel CDC p

CD123

CCR7 on naive

CD19 on memory B cell_panel_B cell_neg BAFF-R on memory B cell_panel_B cell_neg

aive CD4+ panel Maturation stages of CD38 on IgD+ CD38dim panel B cell ne CD25 on CD24+ CD27+ panel B cell pos CD19 on memory B cell panel B cell al

B cell nor