Heritability of Protein Phenotypes

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Outline

Problem:
Explore heritability of Proteins

- Heritability of proteins was chosen as study subject because there are not many published results about it.
- Low data quality and noise was expected.
- Chosen data sets: hapmap release 23, Protein Data from Ron Hause and Lingfeng Wu

General Method

The basic procedure was:

- Select individuals that satisfied $MAF >= 0.05$ with plink 1.07
- Generate Genetic Relationship Matrix with GCTA 1.24.4
- Use GCTA to figure out Restricted Maximum Likelihood (REML) for each protein

Results: