##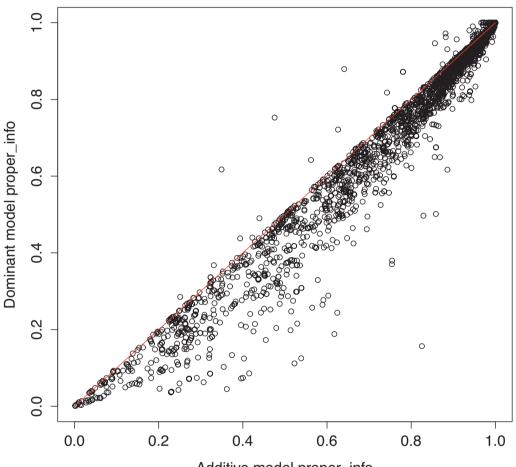 Supplementary information S6