S1 Fig. Sliding-window test results using exon-sequencing of RA cases and controls. An accumulation of true rare missense variants (MAF<0.5%) predicted to be damaging was observed in the Protein kinase 1 domain of TYK2. Association results from 500 bp sliding window tests in SKAT-O restricted to nonsense variants (pink) and missense variants predicted to be damaging (red) are shown. Variants with MAF>1% (indicated by a star) were excluded in the test. In TYK2, we further excluded the A928V and A53T variants with 0.5%<MAF<1% (indicated by a star) that were independently investigated using Exomechip data. The light blue background highlights the coding sequence region with P<0.05.