

Differential Gene Expression and Functional Analysis in genes close to insertions

Gene ZNF257 (ENSG00000197134 - zinc finger protein 257), which is close to the insertion in chromosome 19:22414379, was observed to have different gene expression (logFC: -0.83686, FDR: 4.10795e-07) in general and also in TSI (logFC: 0.97934, FDR: 0.00995), FIN (logFC: 1.01751, FDR: 0.00014) and CEU (logFC: 1.72905, FDR: 0.0108) populations. In addition gene ZNF208 (ENSG00000160321 - zinc finger protein 208) was observed to have different gene expression in populations CEU (logFC: 1.51264, FDR: 0.0323) and YRI (logFC: 1.64438, FDR: 0.06674).

Gene PDE5A (ENSG00000138735 - phosphodiesterase 5A), which is close to the insertion in chromosome 4:120263688, was observed to have different gene expression (logFC: -0.45287, FDR: 6.64172e-05) in general.

One gene, that are close to the insertion in chromosome 1:111802592, OVGP1 (ENSG00000085465 - oviductal glycoprotein 1) was observed to have different gene expression (logFC: -0.38184, FDR: 0.07960) in FIN.

Gene MAP3K4 (ENSG00000085511 - mitogen-activated protein kinase 4), which is close to the insertion in chromosome 6:161270899, was observed to have different gene expression (logFC: 0.32614, FDR: 0.00479) in population CEU and (logFC: -0.12062, FDR: 0.00358) in general.

Gene TCTN2 (ENSG00000168778 - tectonic family member 2), which is close to the insertion in chromosome 12:124066477, was observed to have different gene expression in population GBR (logFC: 0.35192, FDR: 0.05903).

Also one gene, that is close to the insertion in chromosome 19:21841536, ZNF429 (ENSG00000197013 - zinc finger protein 429), was observed to have different gene expression in population GBR (logFC: 0.41543, FDR: 0.02695).

Differential Gene Expression and Functional Analysis in genes in whole genome

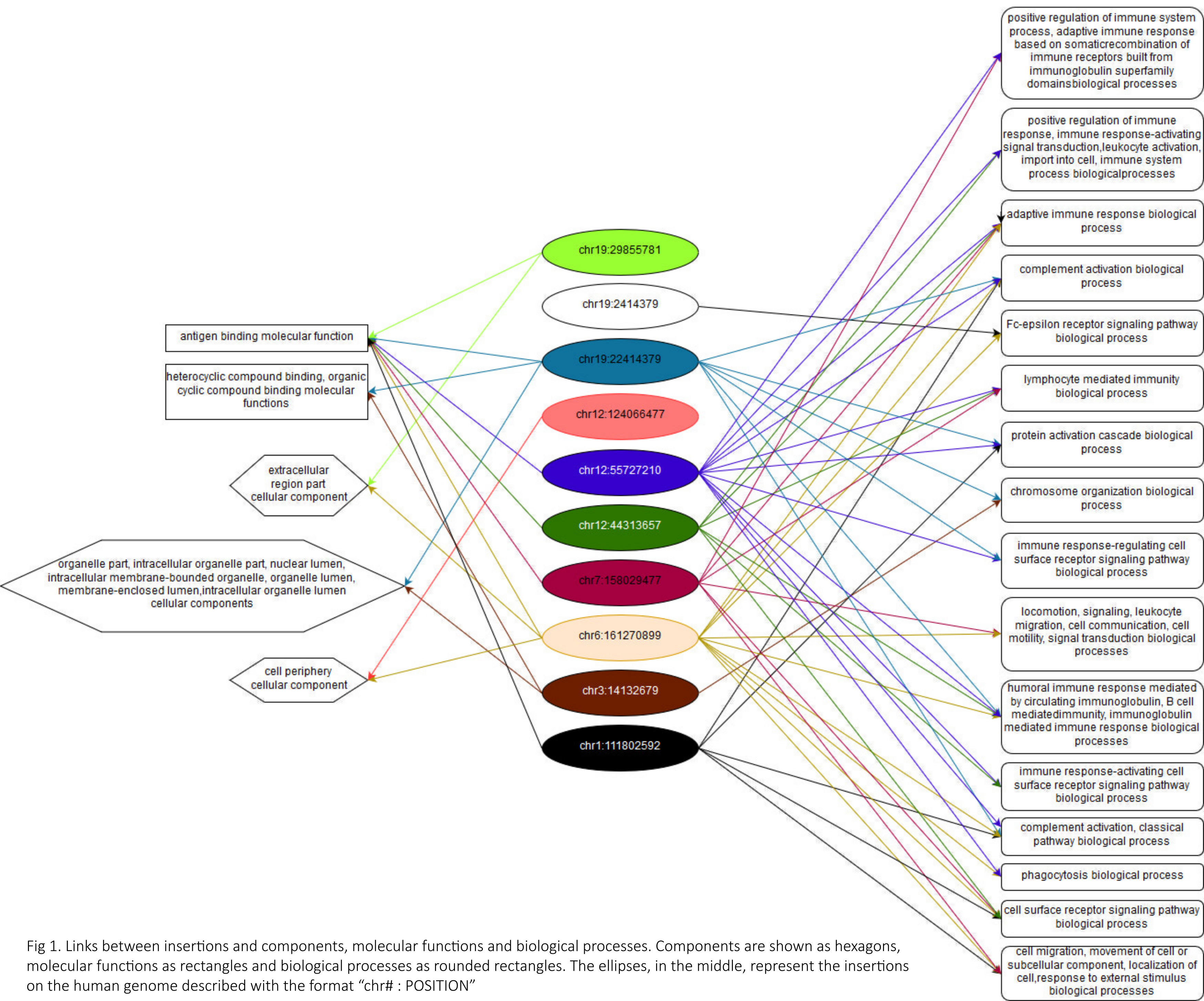


Fig 1. Links between insertions and components, molecular functions and biological processes. Components are shown as hexagons, molecular functions as rectangles and biological processes as rounded rectangles. The ellipses, in the middle, represent the insertions on the human genome described with the format “chr# : POSITION”