



**Online Figure-4. Illustration of pTyr-SNVs in the human genome as karyotype plot.** The loci in the human genome where pTyr-SNV alleles create or delete a pTyr-based proximal signalling motifs, including the STAT3-recruiting SeSNV allele, are shown in this karyotype plot. Red rectangles indicate variants that create pTyr motifs, while blue rectangles indicate variants that delete pTyr motifs. The coloring is not to scale, as the precise locations and the receptors containing these alleles are not disclosed to maintain the confidentiality of their clinically applicable biomarker potential.