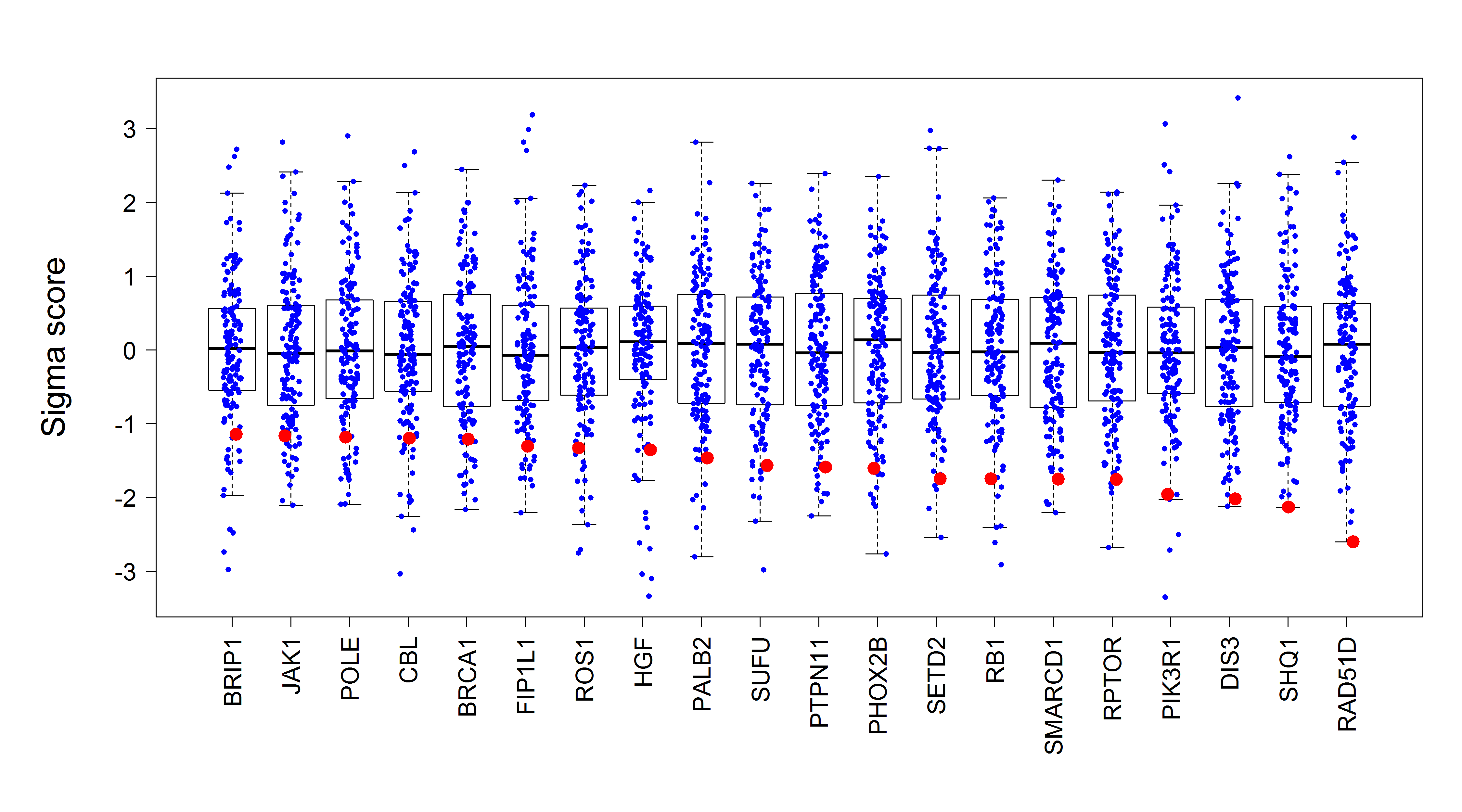
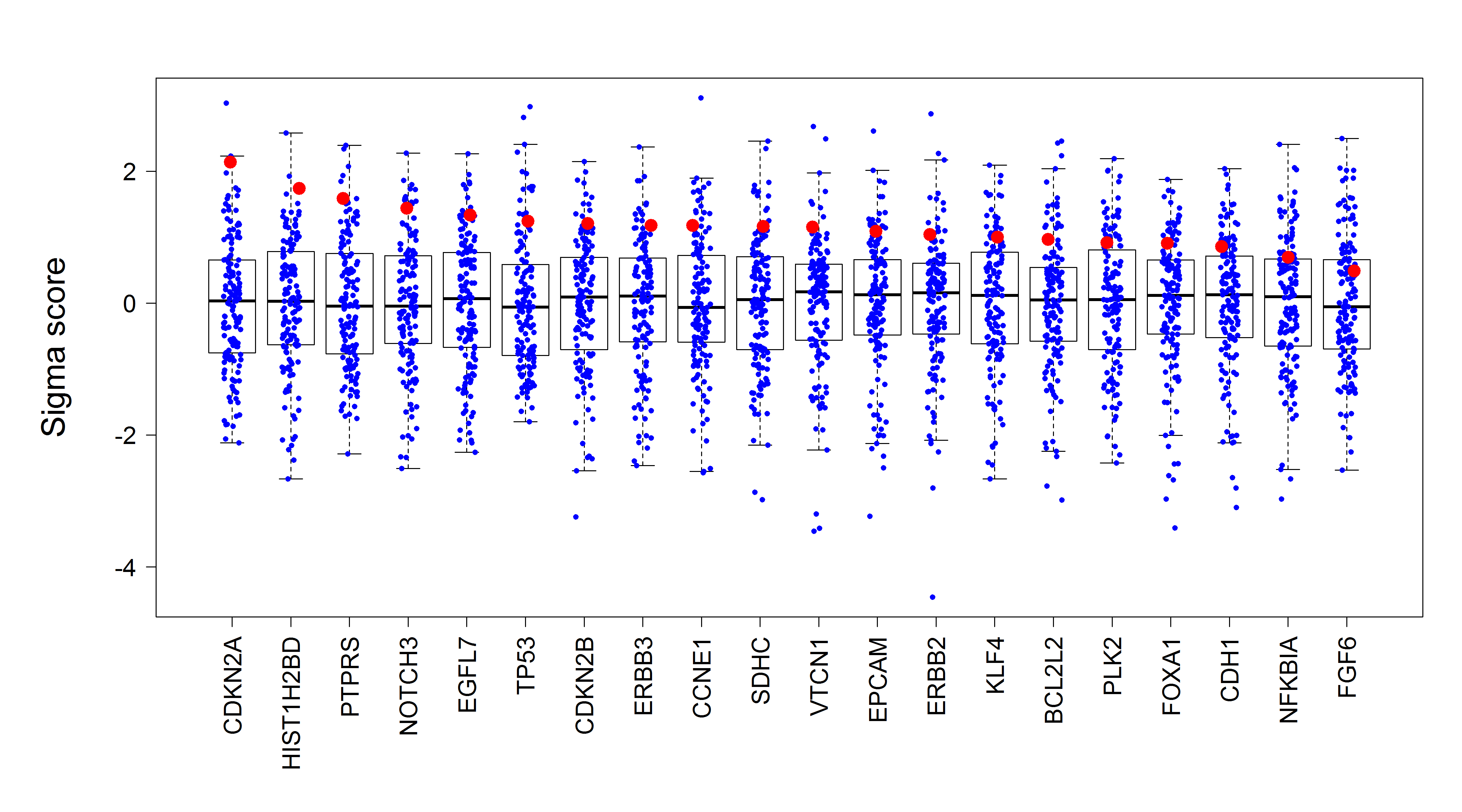
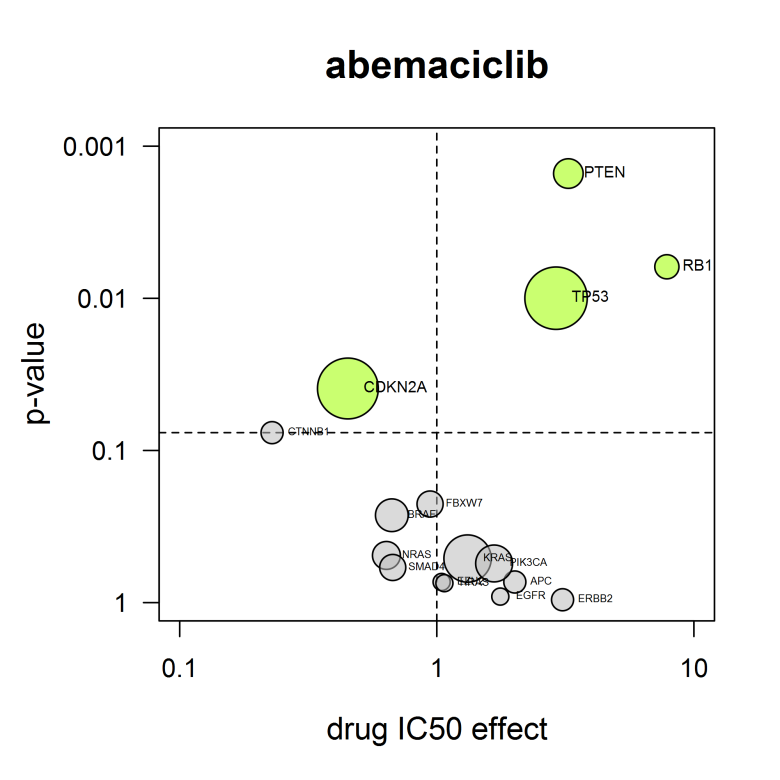
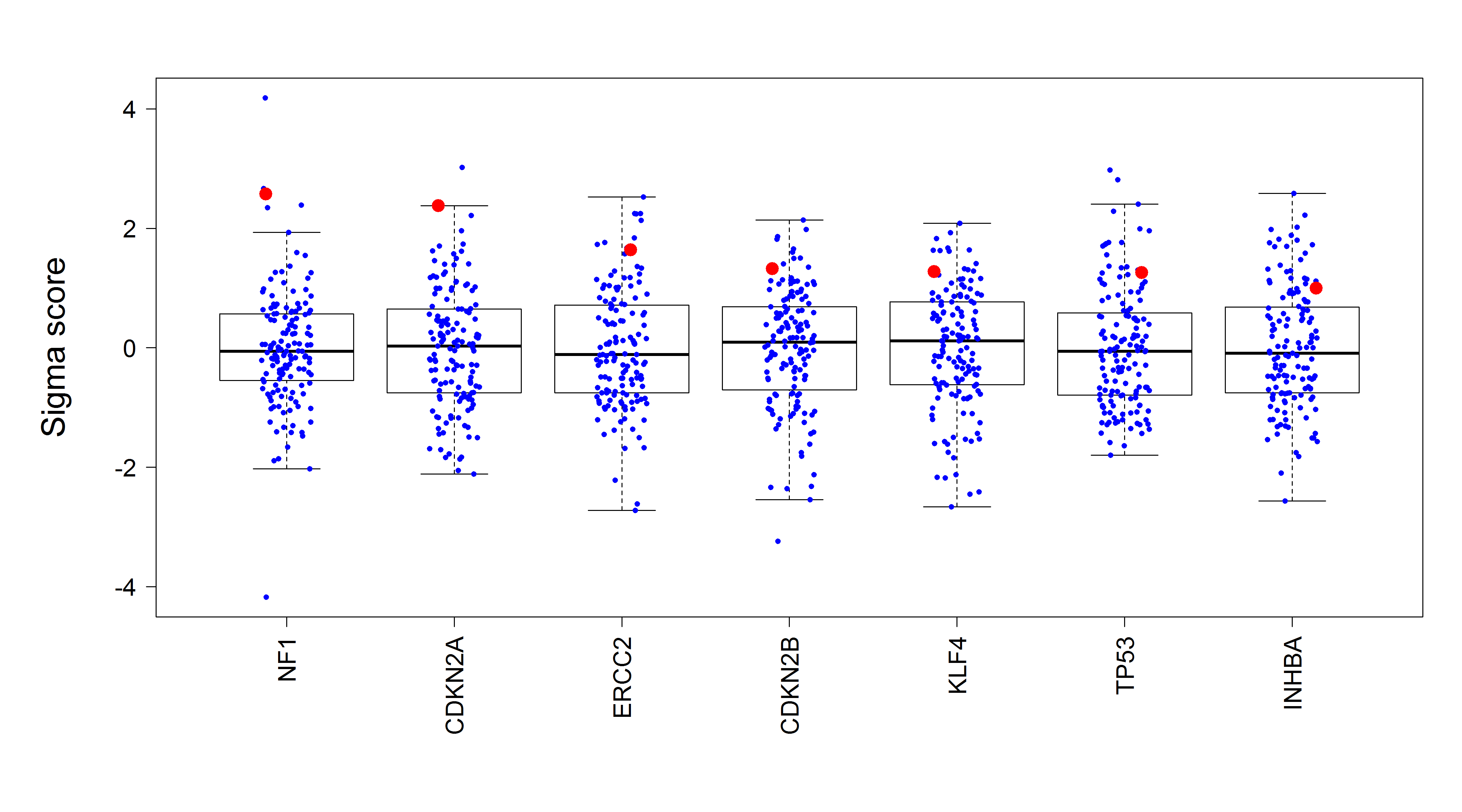
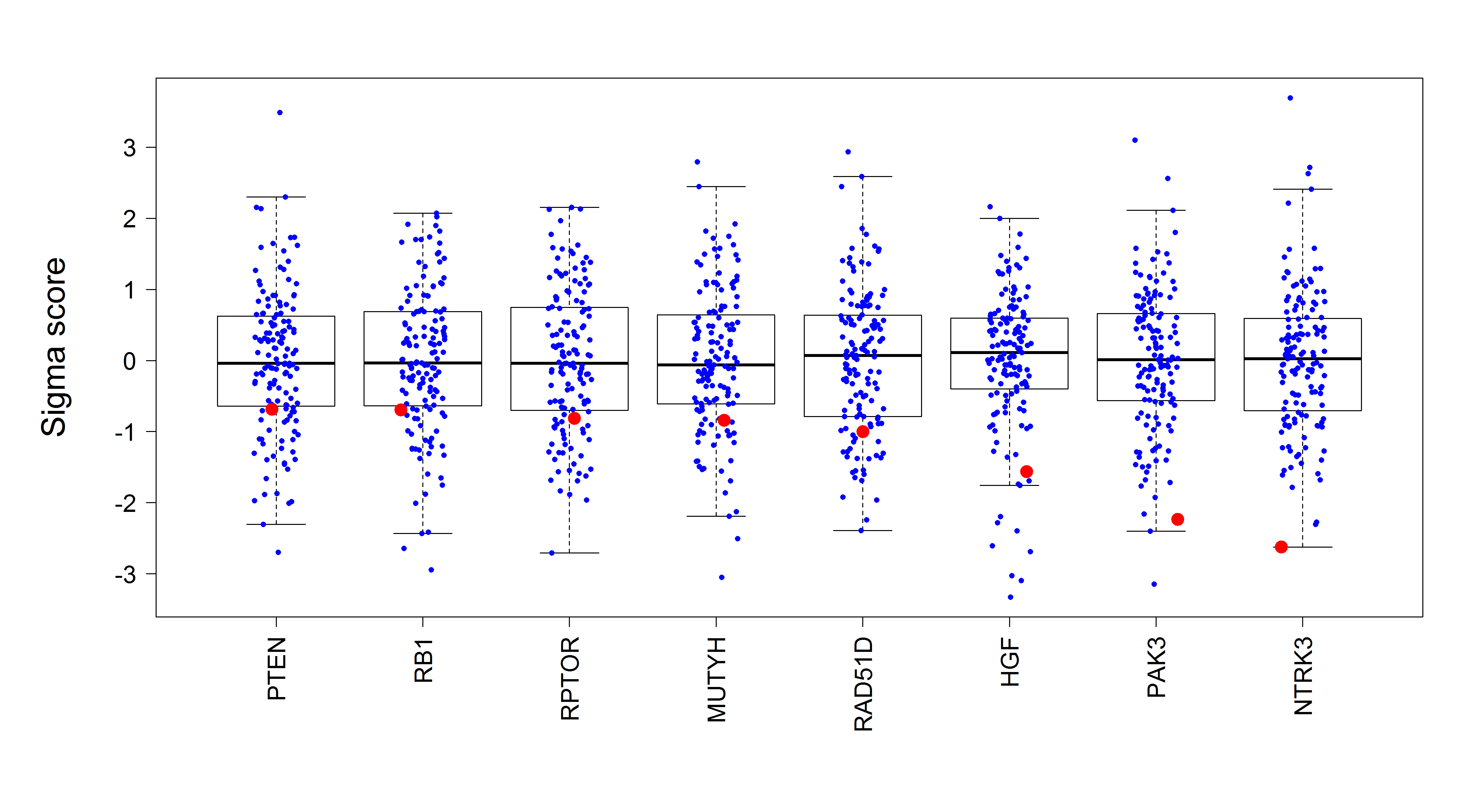
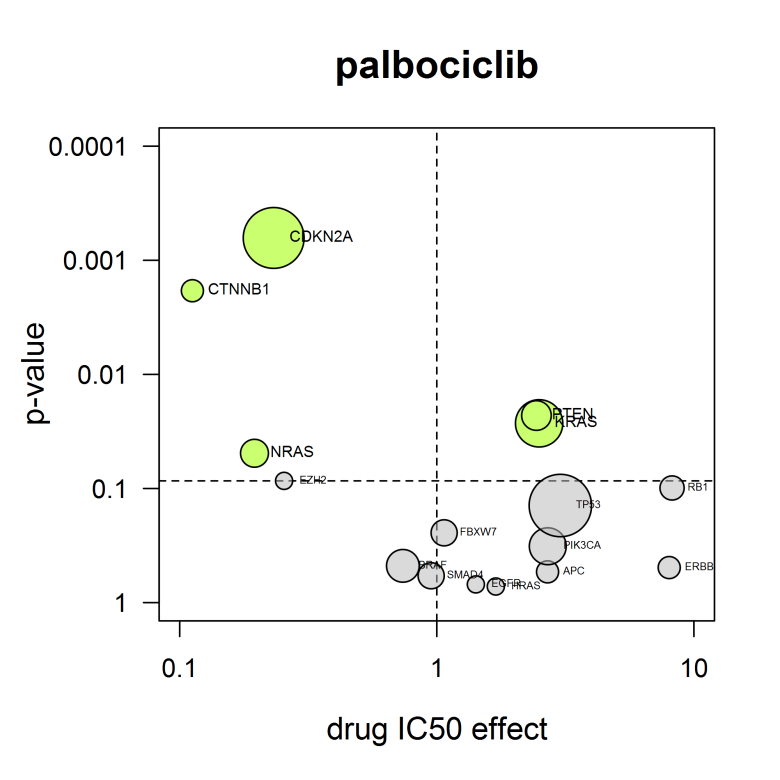
**Uitdehaag *et al.* (2018) Supplementary Figure S3.** Complete drug response biomarker analysis of all kinase inhibitors approved for clinical use since November 2013 (including crizotinib).

**Outline**

Each subfigure consists of 3 panels. **Left,** ANOVA analysis relating drug response to hotspot cancer gene mutations and copy number variations in cell lines. Genomic variations were filtered according to the procedure outlines in Figure S1. Genes with padjusted < 0.2 (dotted line) are colored green. Circle areas are proportional to number of cell lines with variations in the gene. x-axis: IC50 ratio < 1 indicates sensitivity, IC50 ratio > 1 indicates resistance. **Top right,** Correlation analysis of drug sensitivity with basal gene expression levels in the cell lines. Only clinically actionable genes with significant Pearson correlations are shown (p < 0.05). If more than 20 are significant, only the top 20 are shown. The analyzed compound (red circles) is compared to the score of 142 other inhibitors (blue circles). Correlations were Fisher-z transformed and normalized to a sigma score. A positive score indicates low gene expression correlates with low (potent) 10logIC50. See Figure S2 for a detailed workflow. **Bottom right,** as for the top right panel but for negatively correlated genes, indicating high gene expression correlates with low (potent) 10logIC50. Since the cellular inhibition profile of acalabrutinib is heavily based on only one cell line, no response biomarker analyses have been performed for this compound.

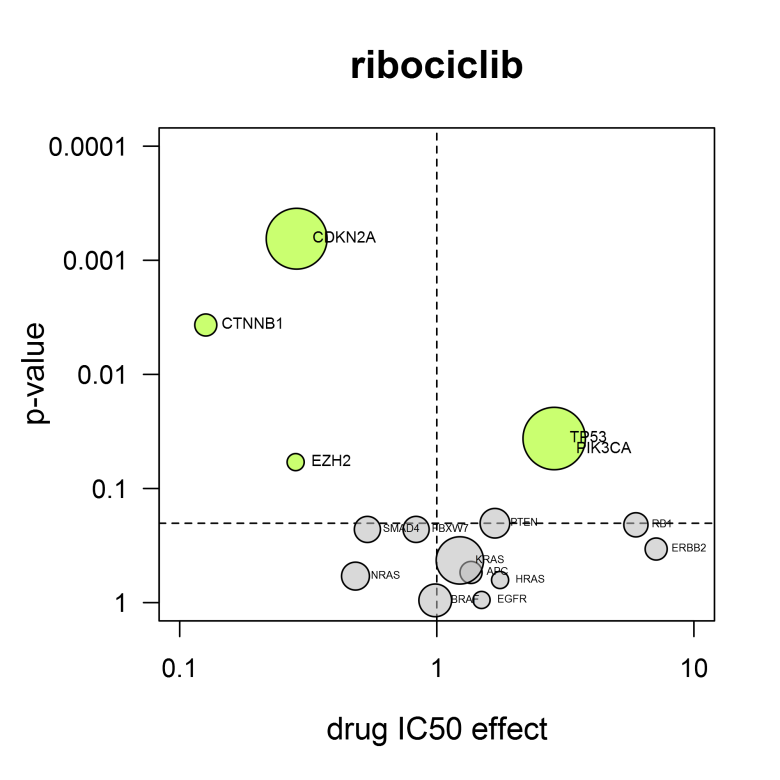
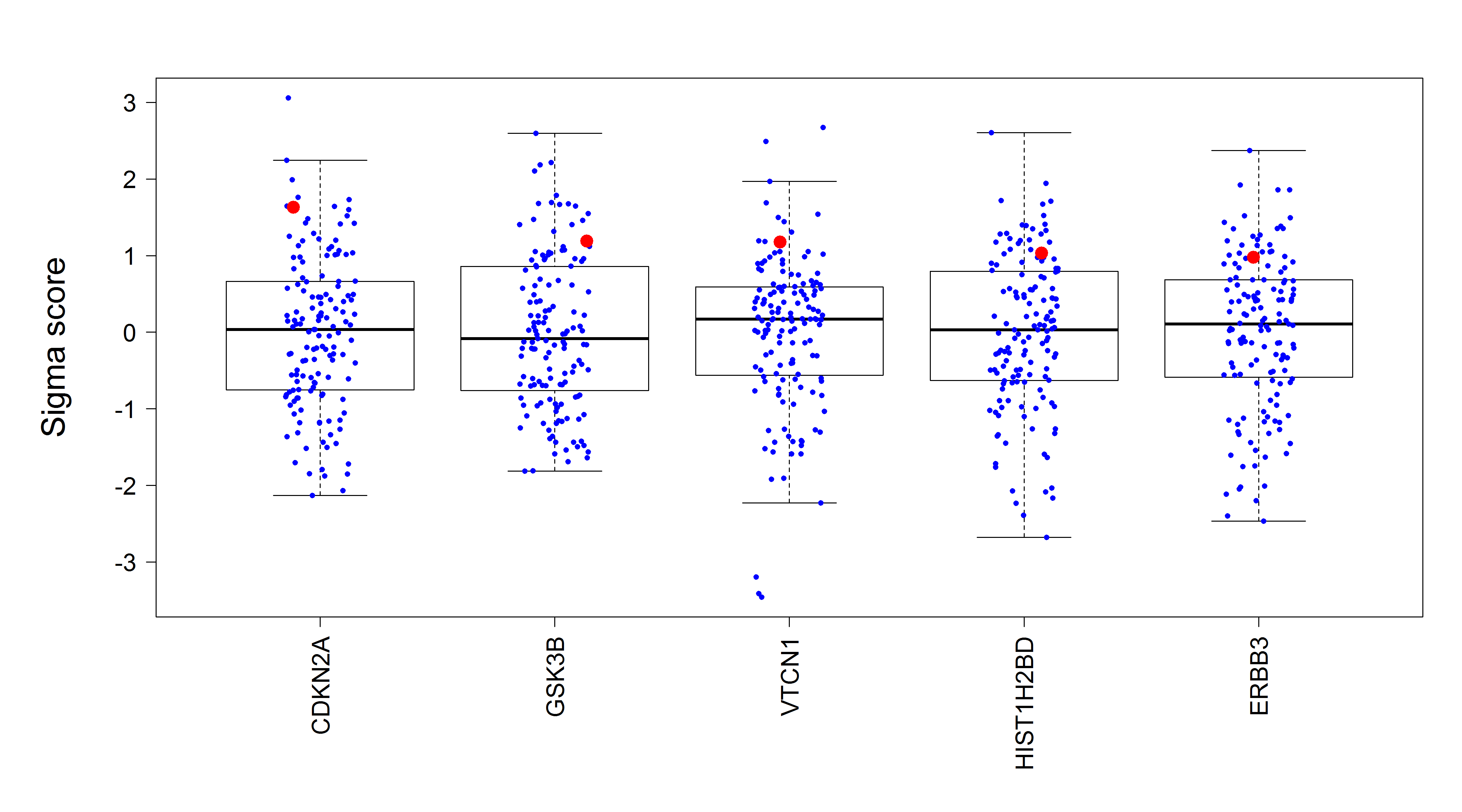
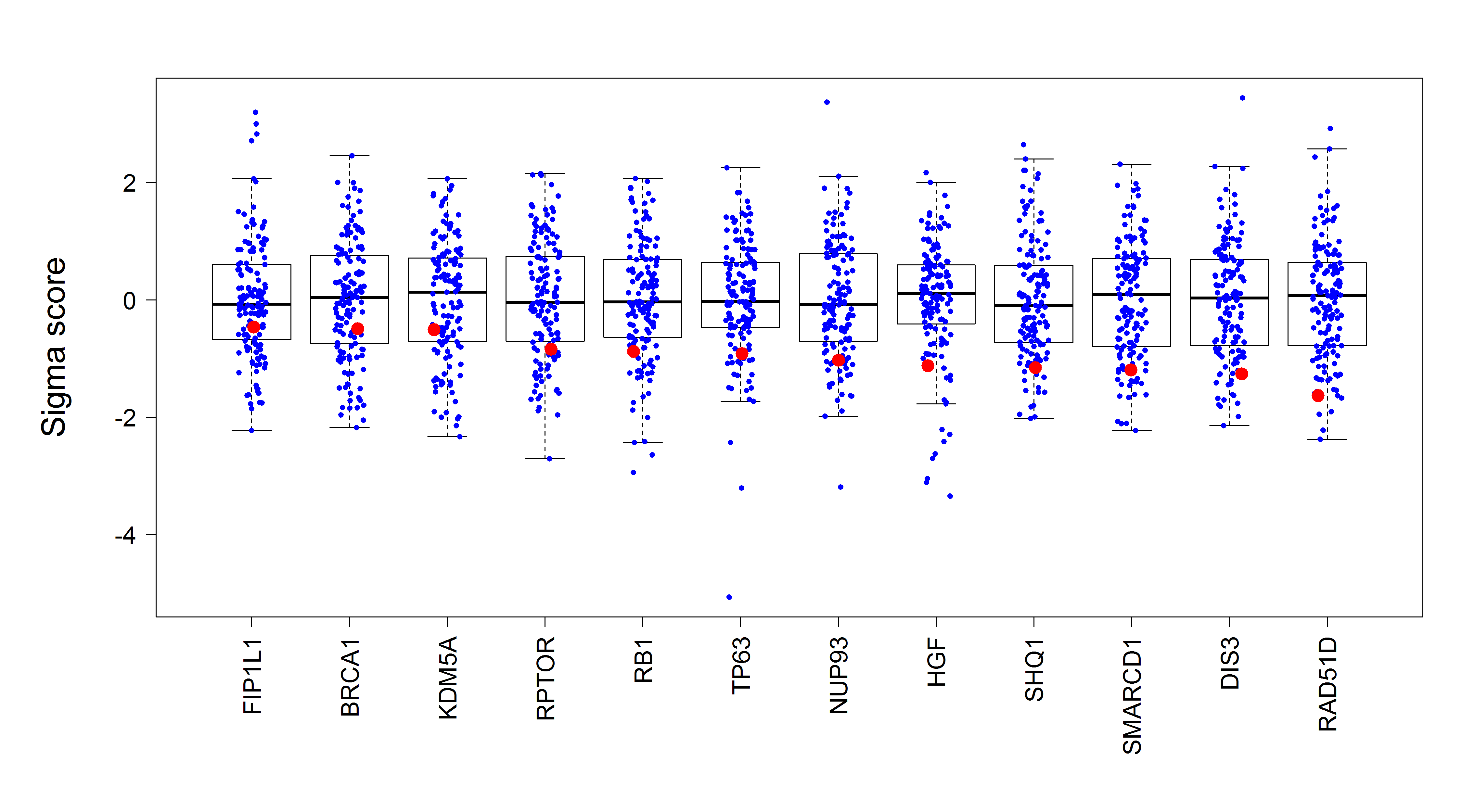
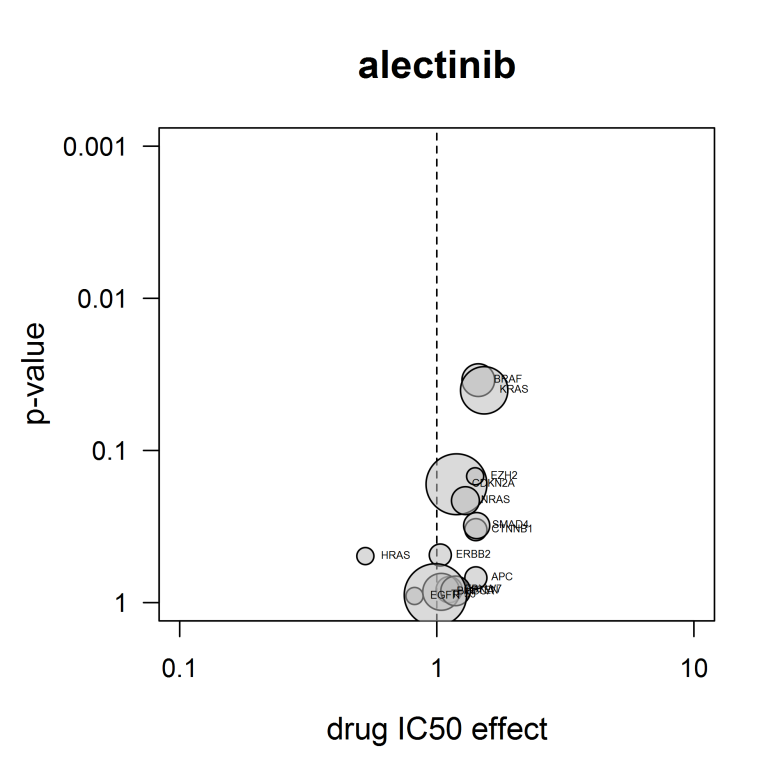
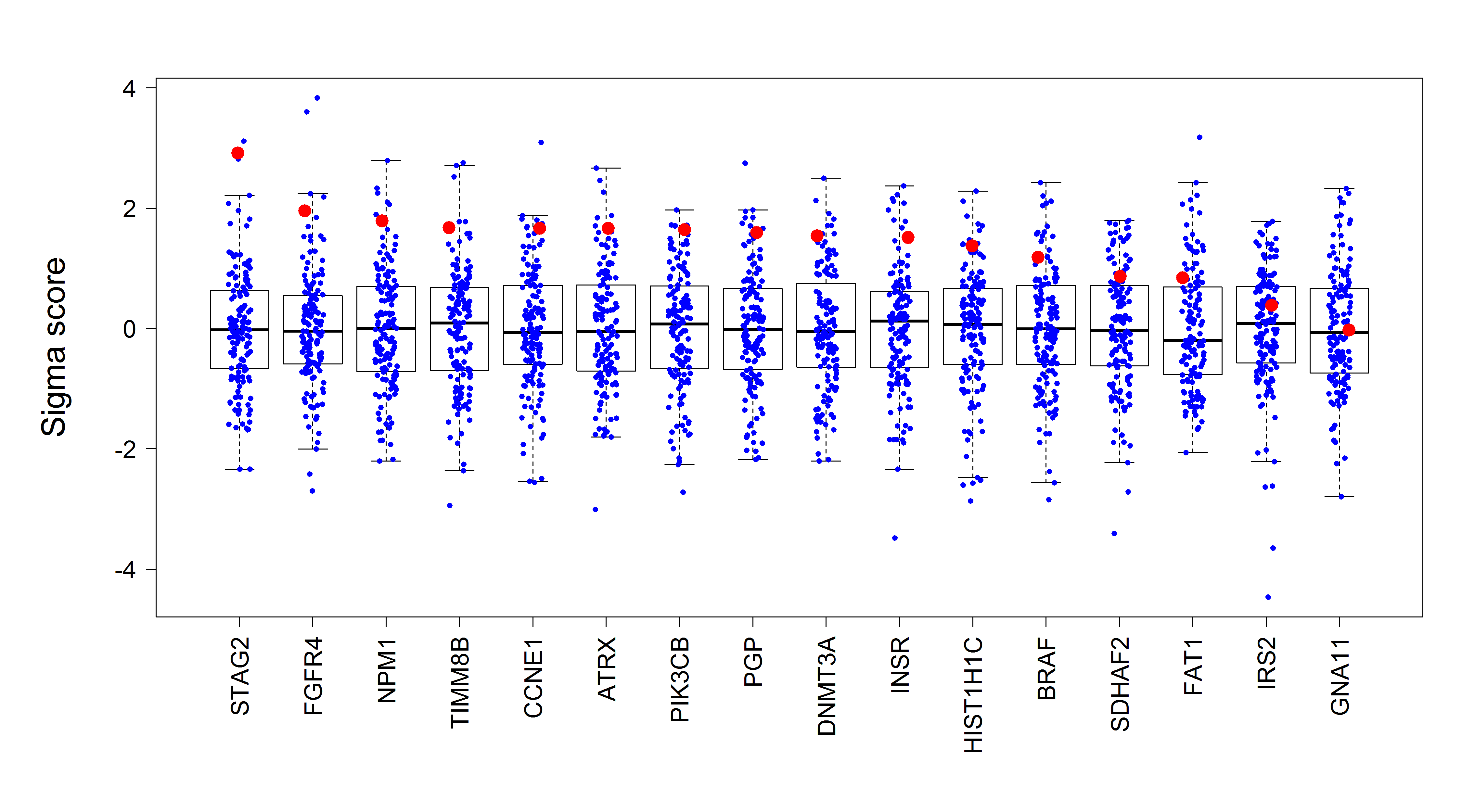
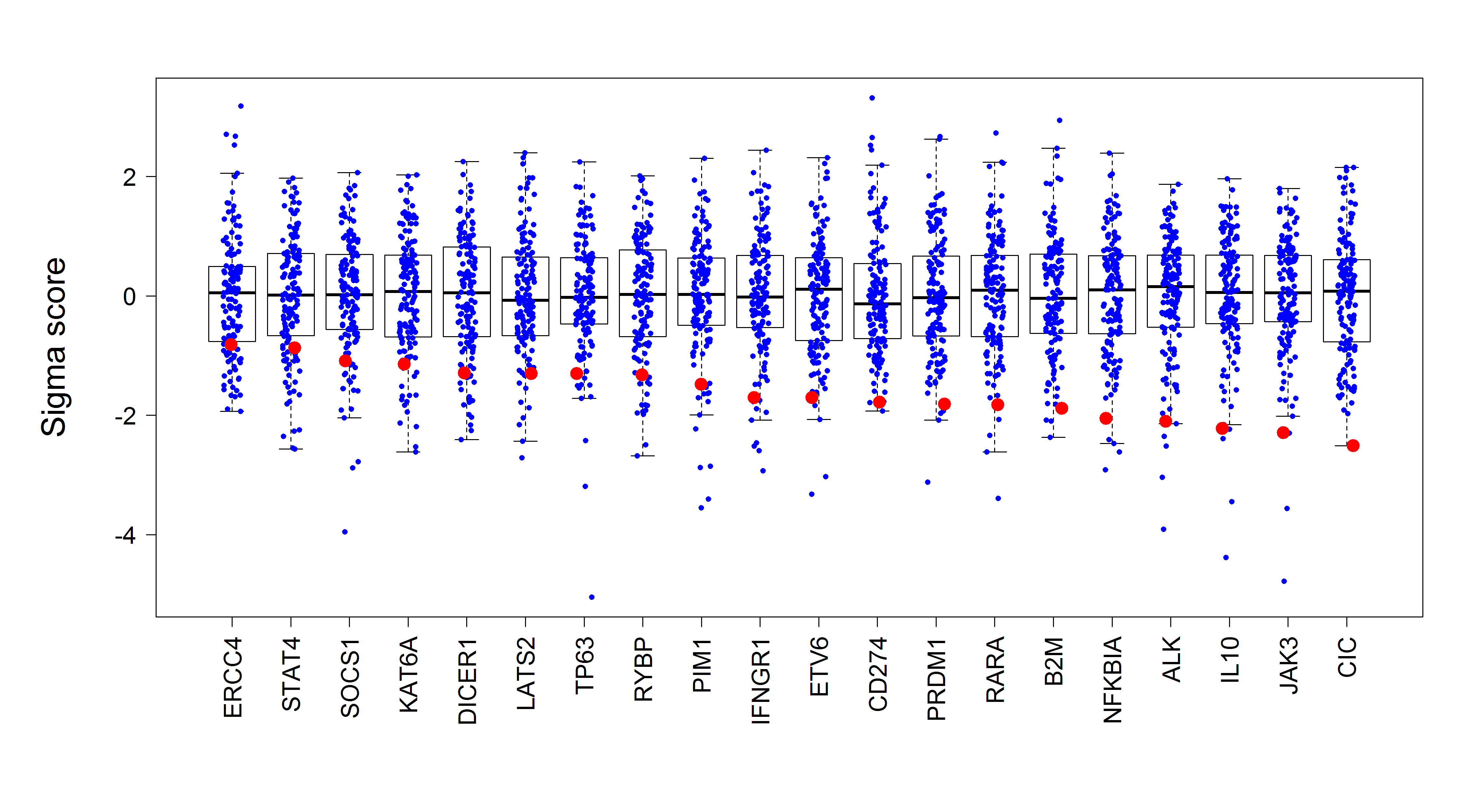


**B**

**A**

**Figure S3B.** Response biomarker analysis of palbociclib. The boxplots are also presented in Figure 2 of the main text.

**Figure S3A.** Response biomarker analysis of abemaciclib.

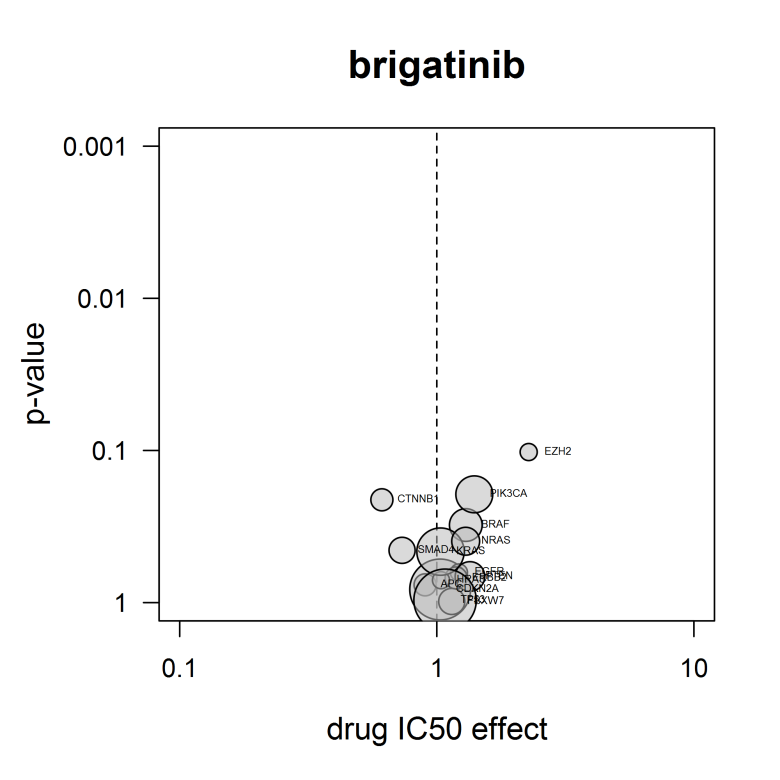
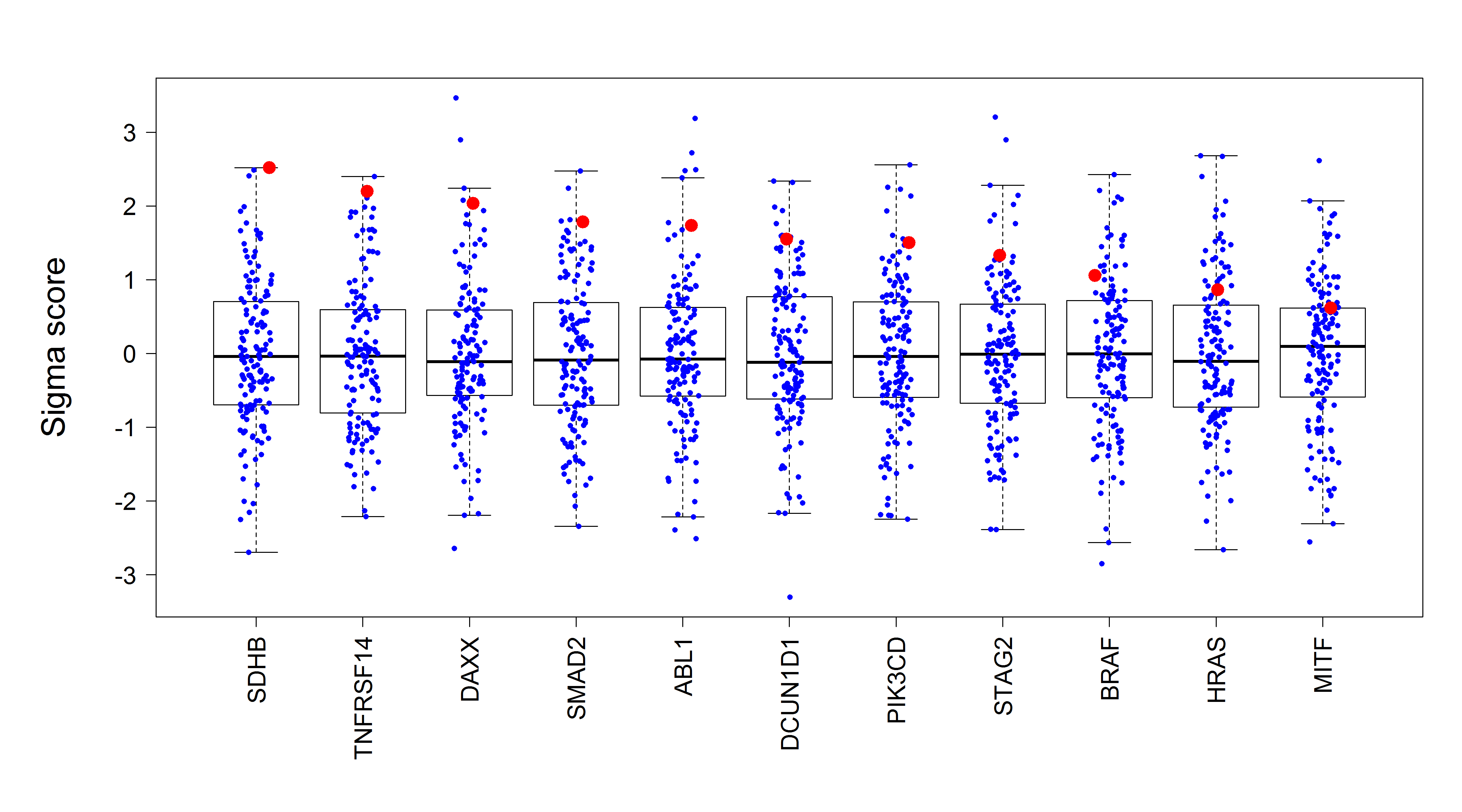
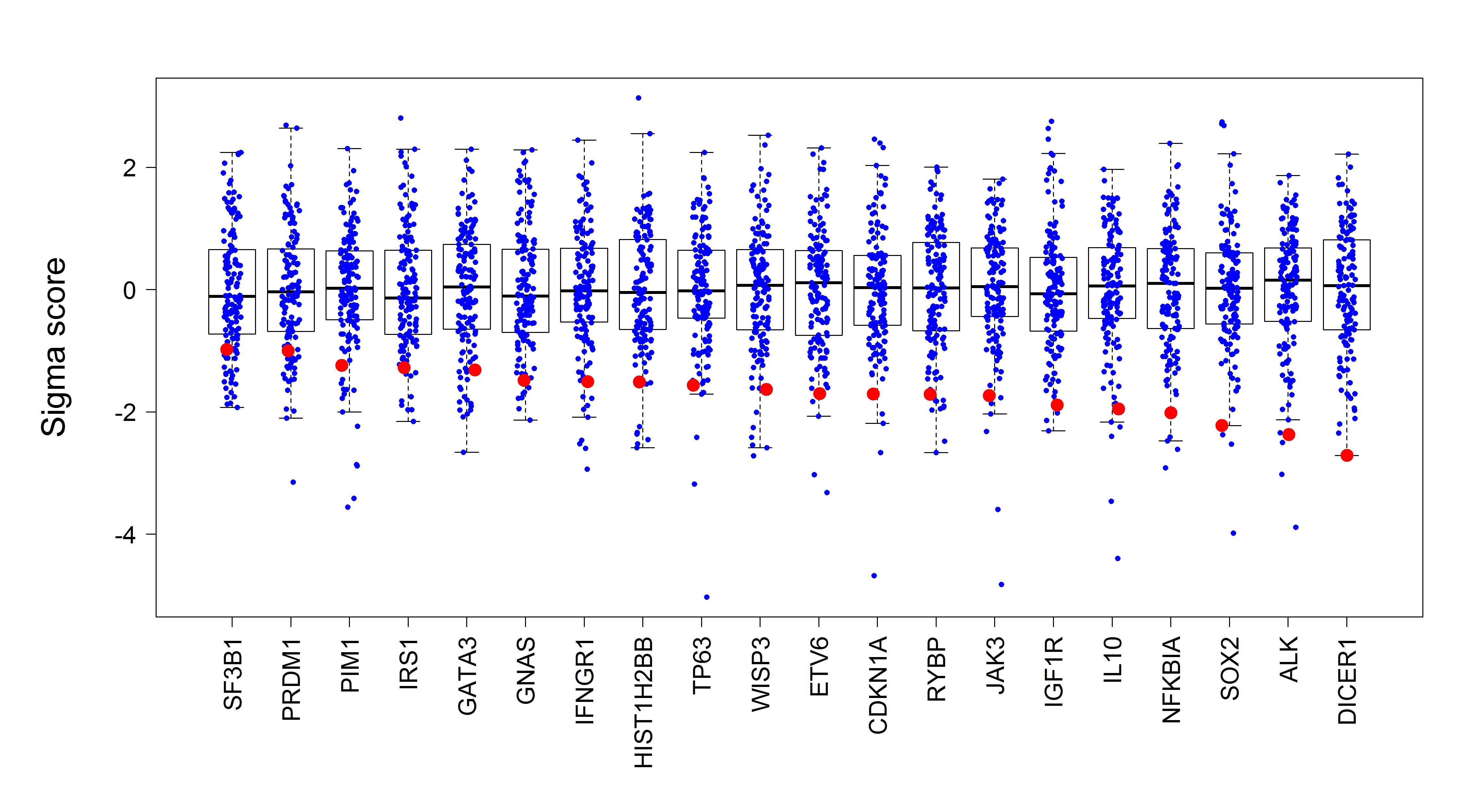
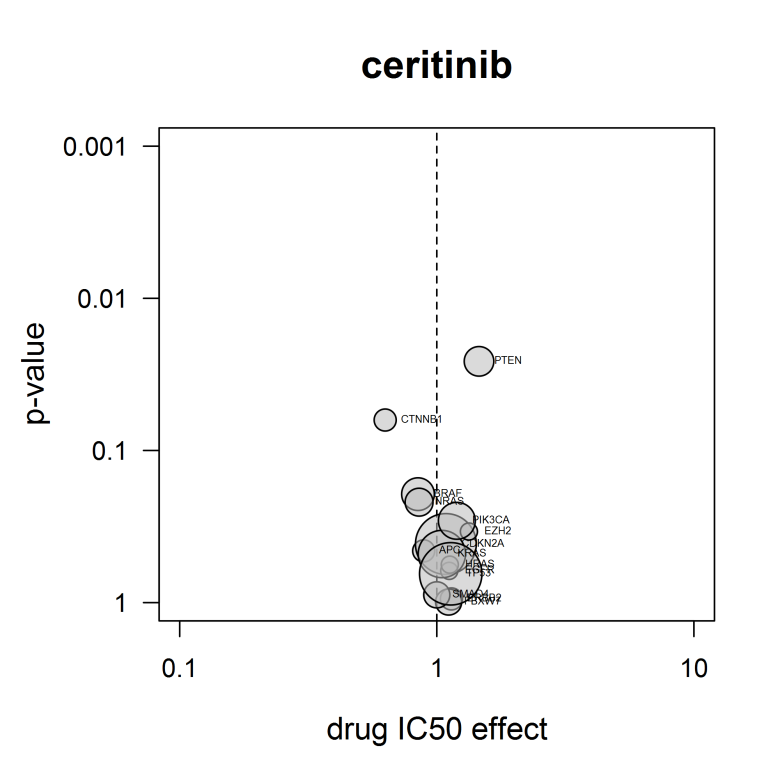
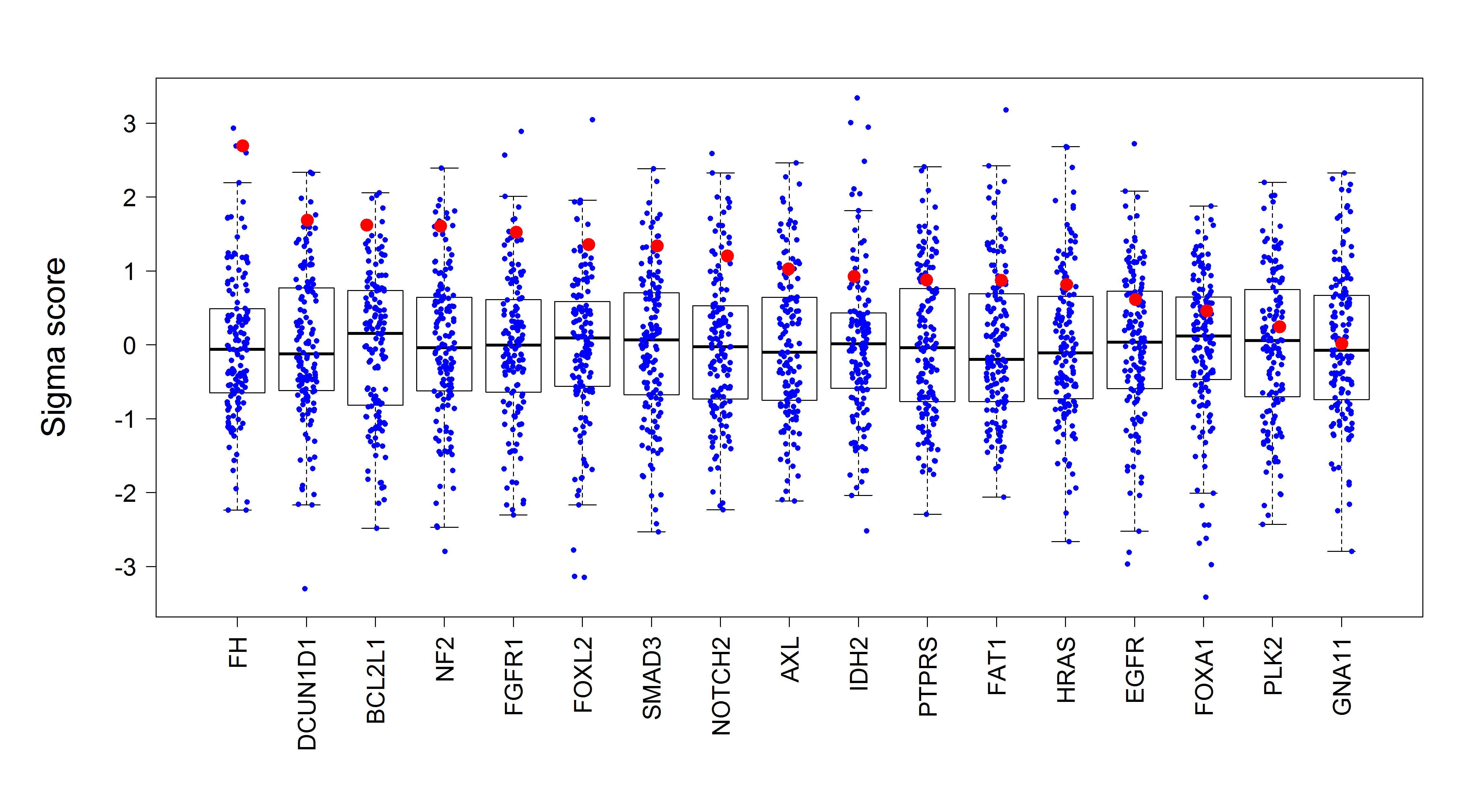
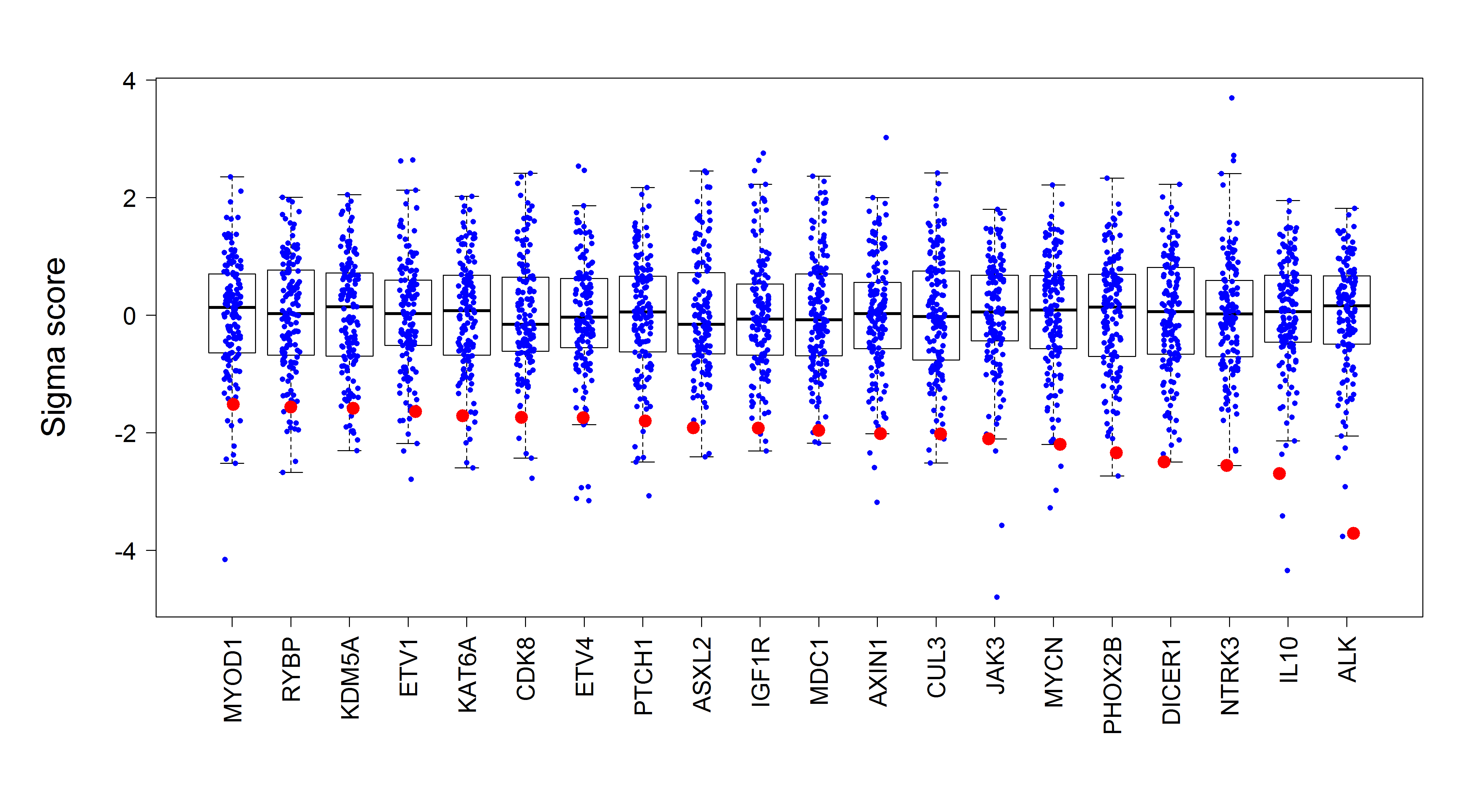


**Figure S3D.** Response biomarker analysis of alectinib.

**Figure S3C.** Response biomarker analysis of ribociclib. The volcano plot is also presented in Figure 2 of the main text.

**D**

**C**

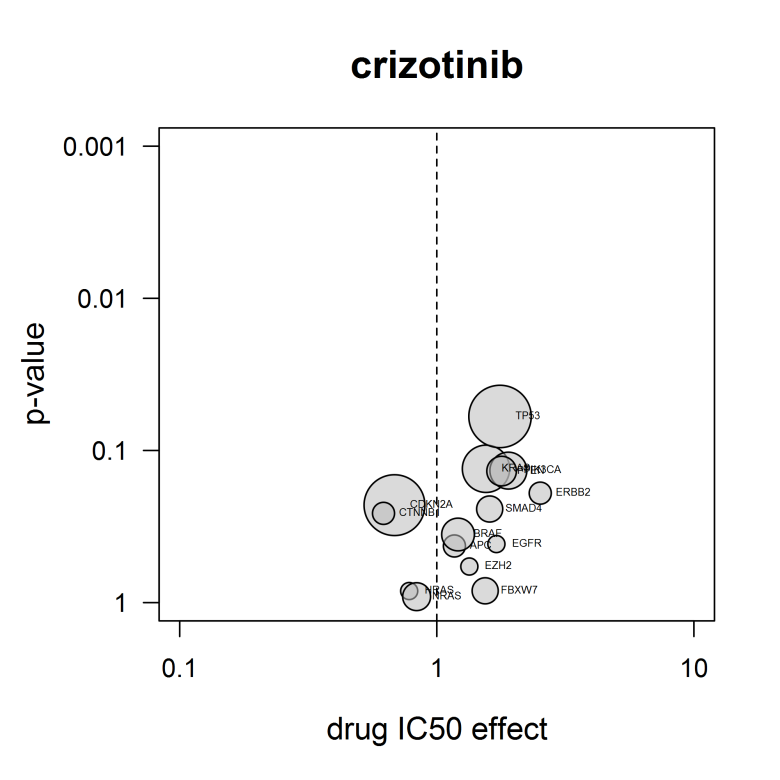
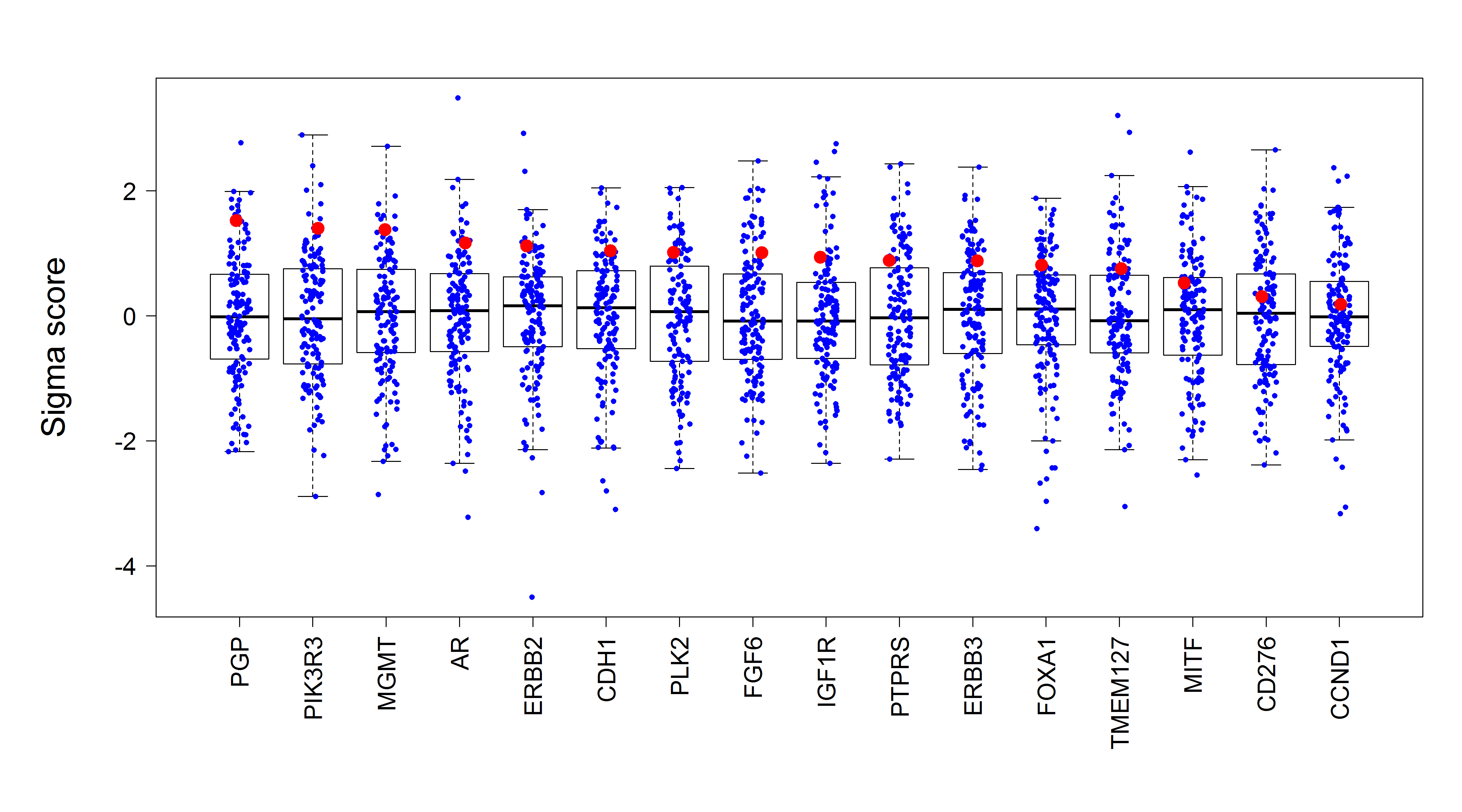
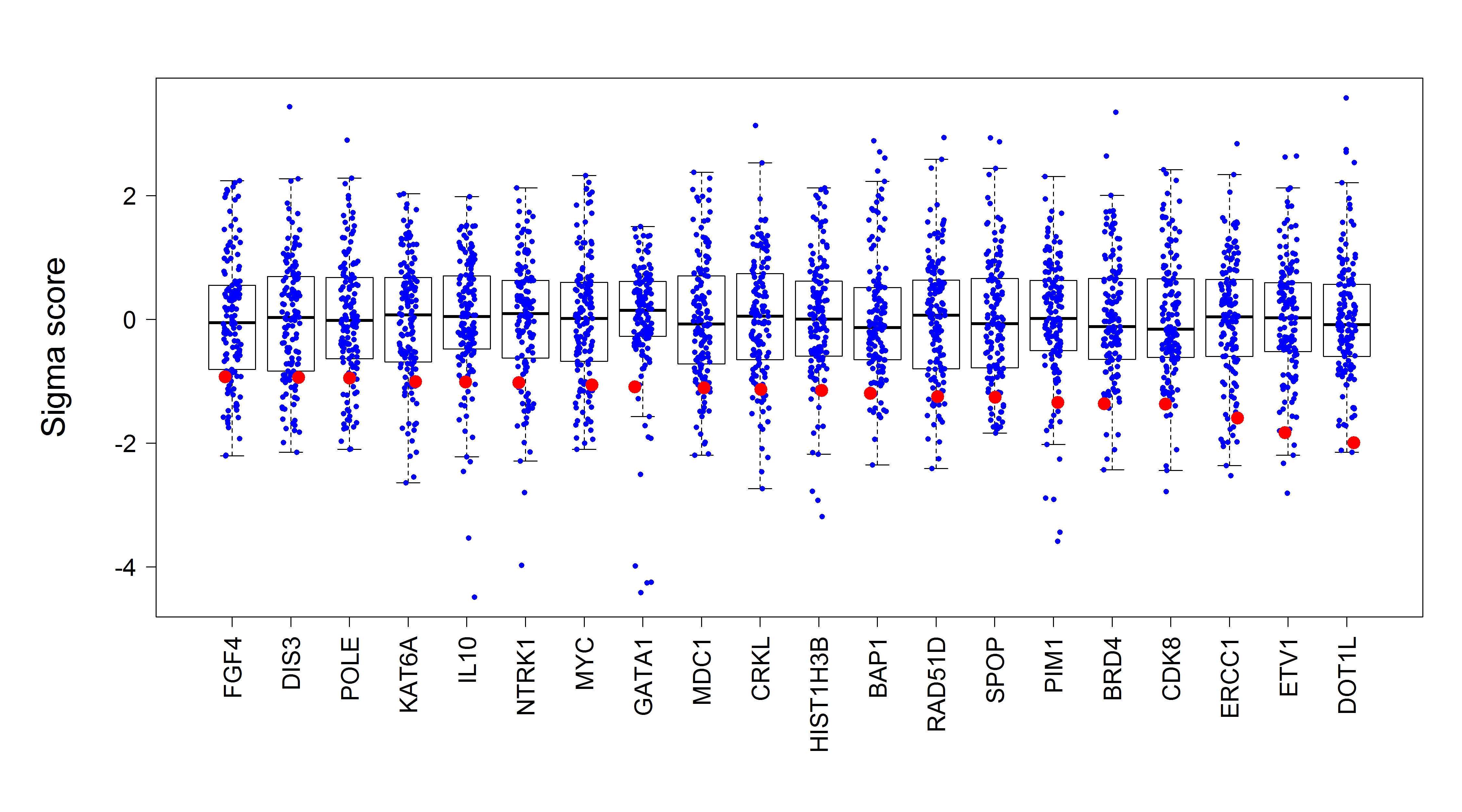
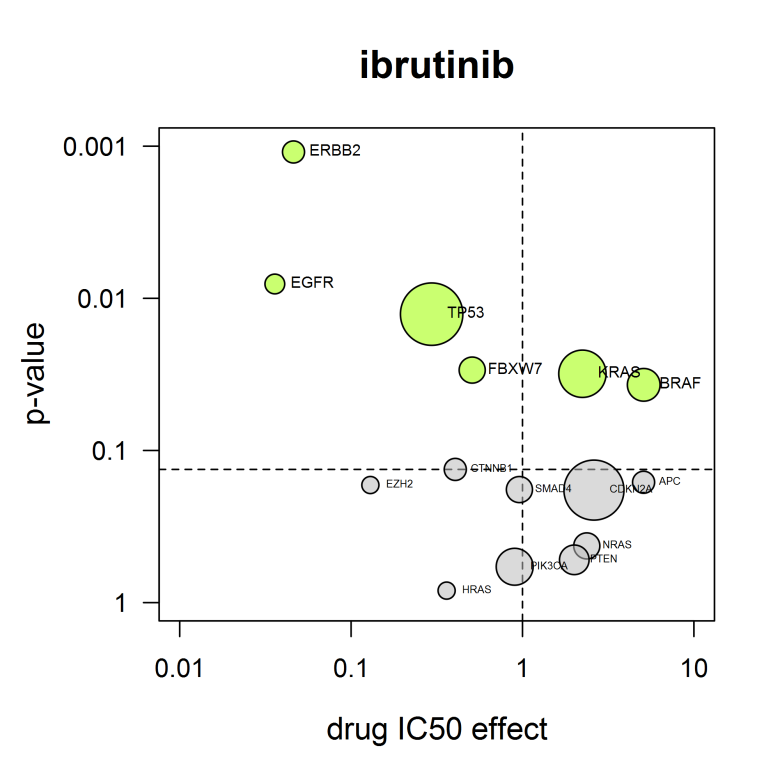
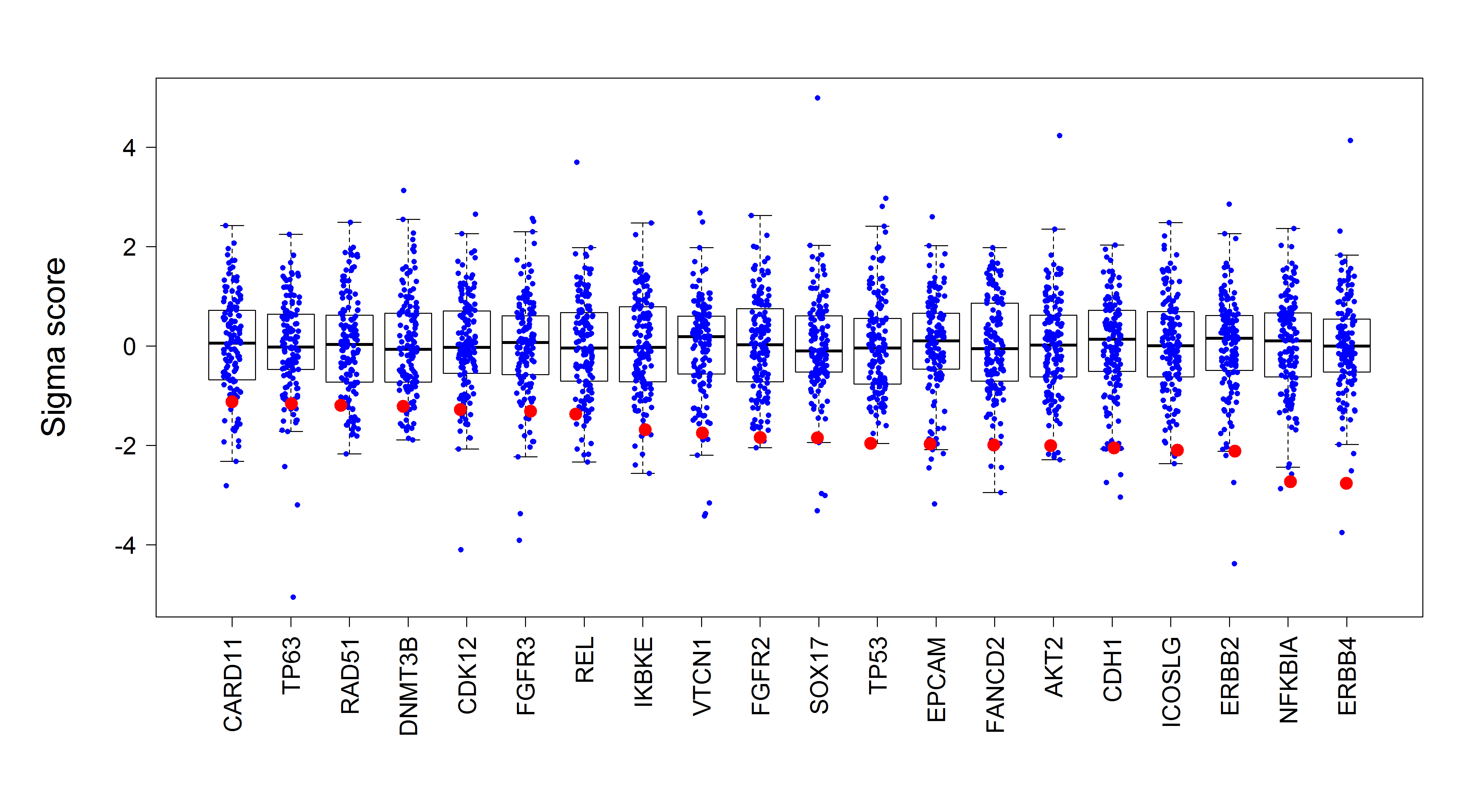
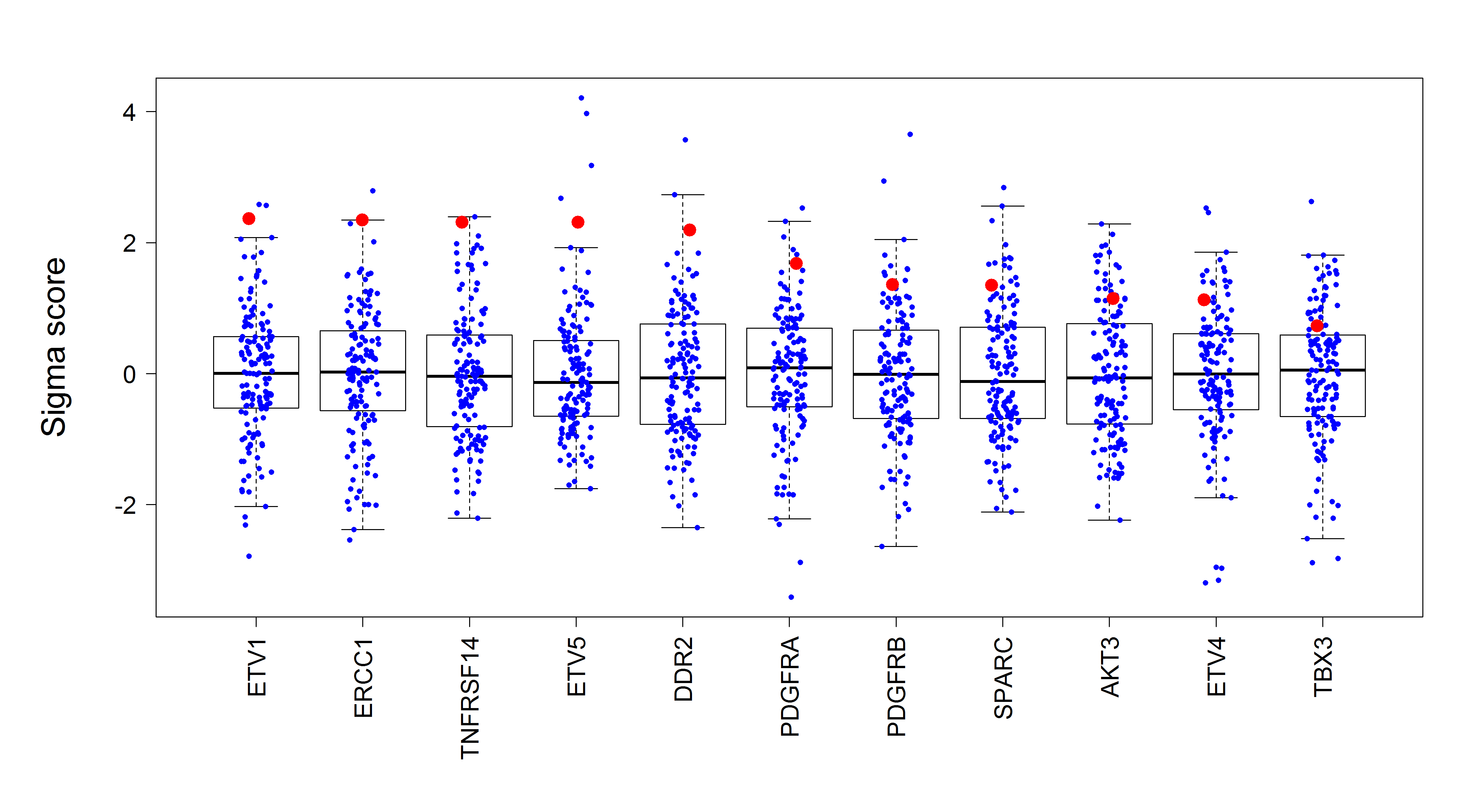


**Figure S3F.** Response biomarker analysis of ceritinib.

**Figure S3E.** Response biomarker analysis of brigatinib. A shortened version of the bottom boxplot is presented in Figure 3 of the main text.

**F**

**E**

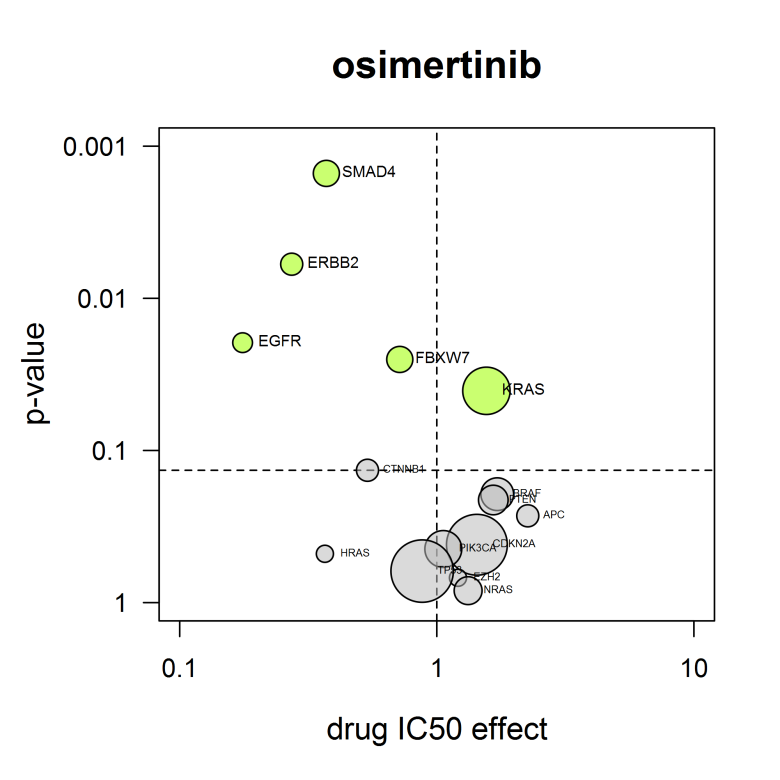
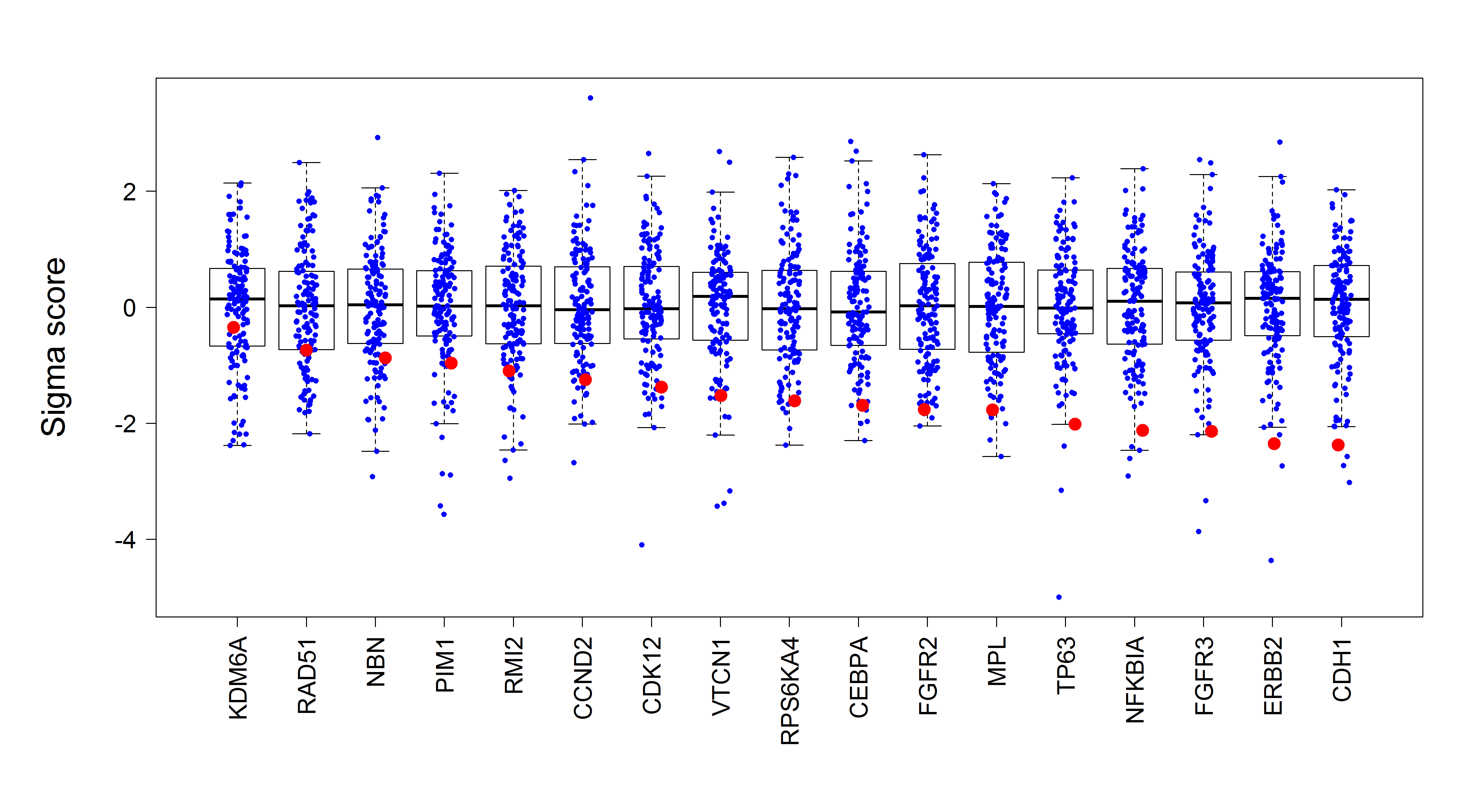
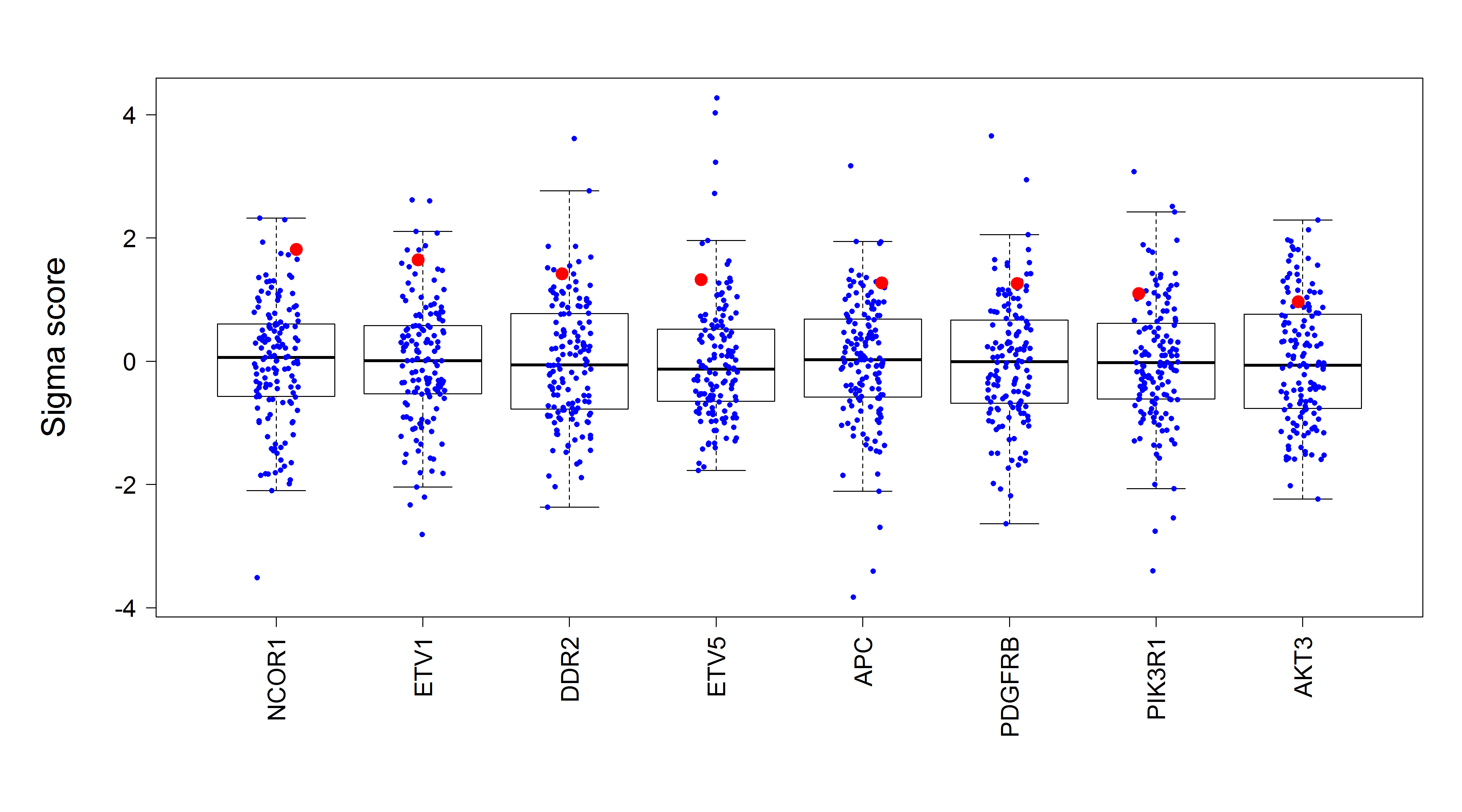
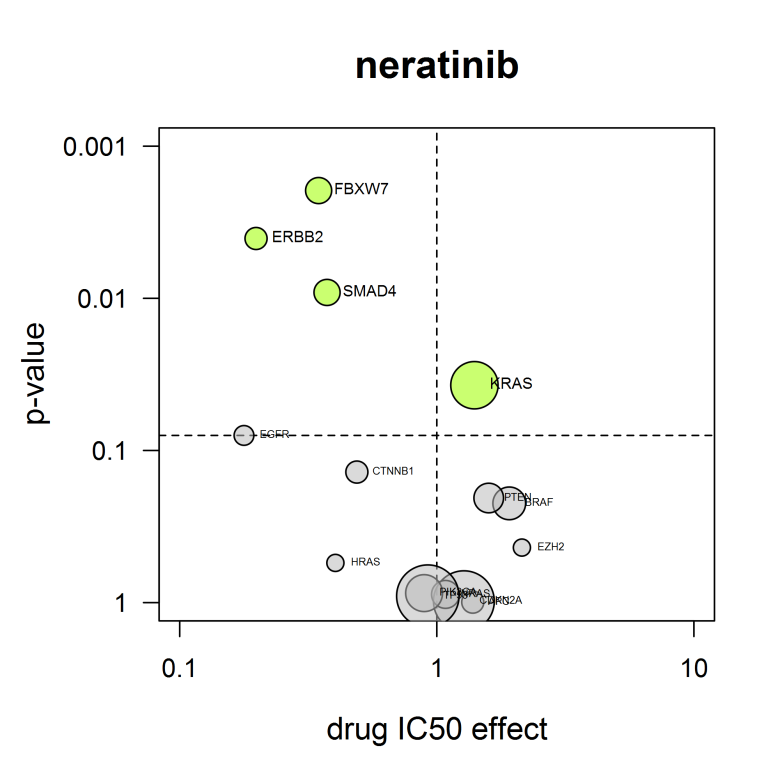
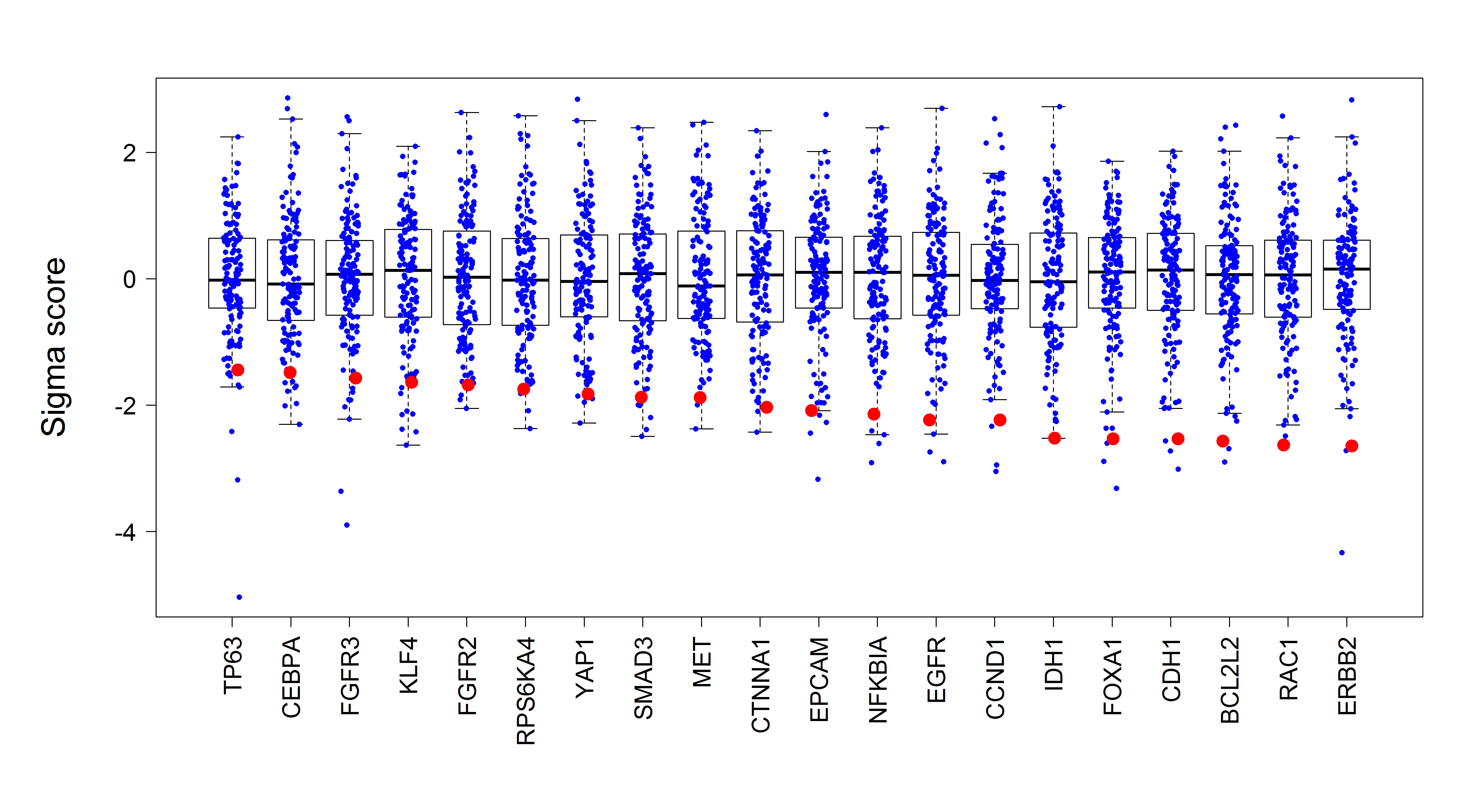
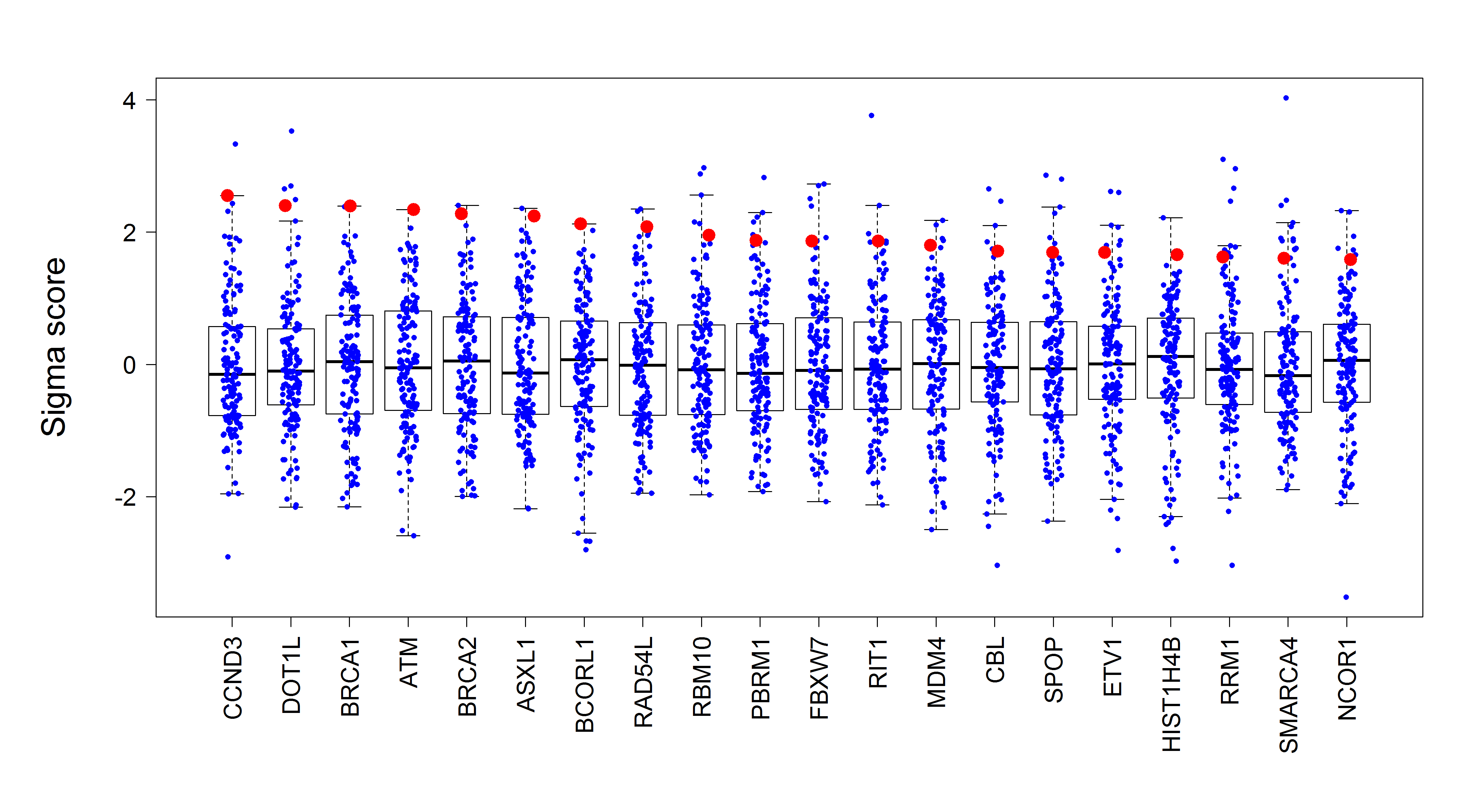


**Figure S3H.** Response biomarker analysis of ibrutinib. The volcano plot, a shortened version of the top boxplot, and the bottom boxplot are also presented in Figure 4 of the main text.

**Figure S3G.** Response biomarker analysis of crizotinib. Crizotinib is not part of the seventeen kinase inhibitors approved for clinical use since November 2013.

**H**

**G**

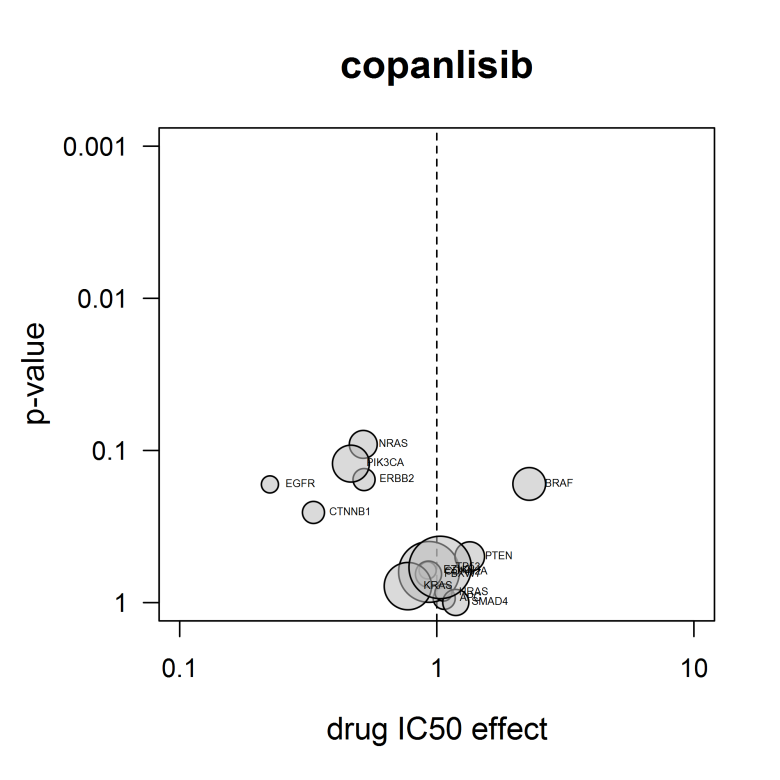
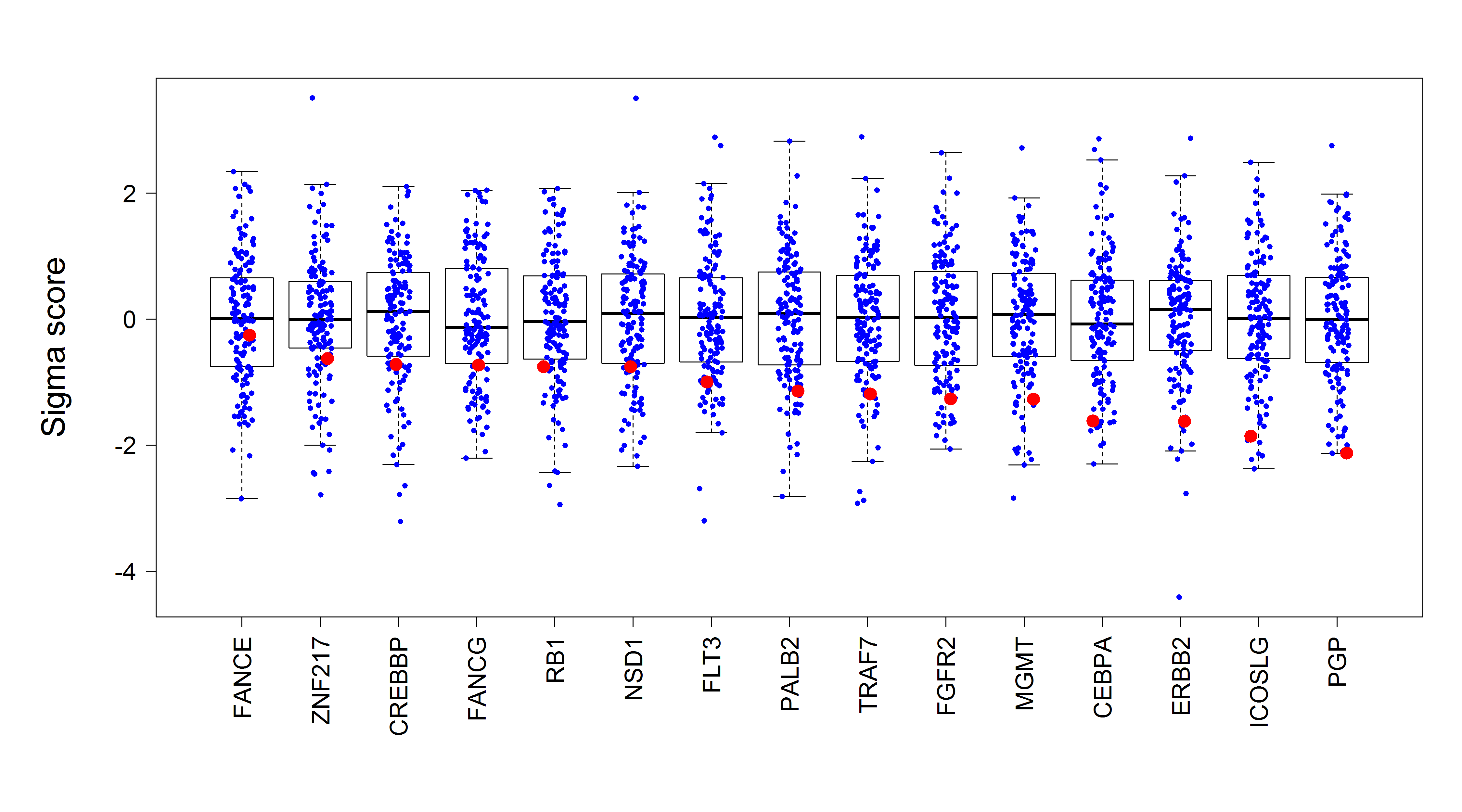
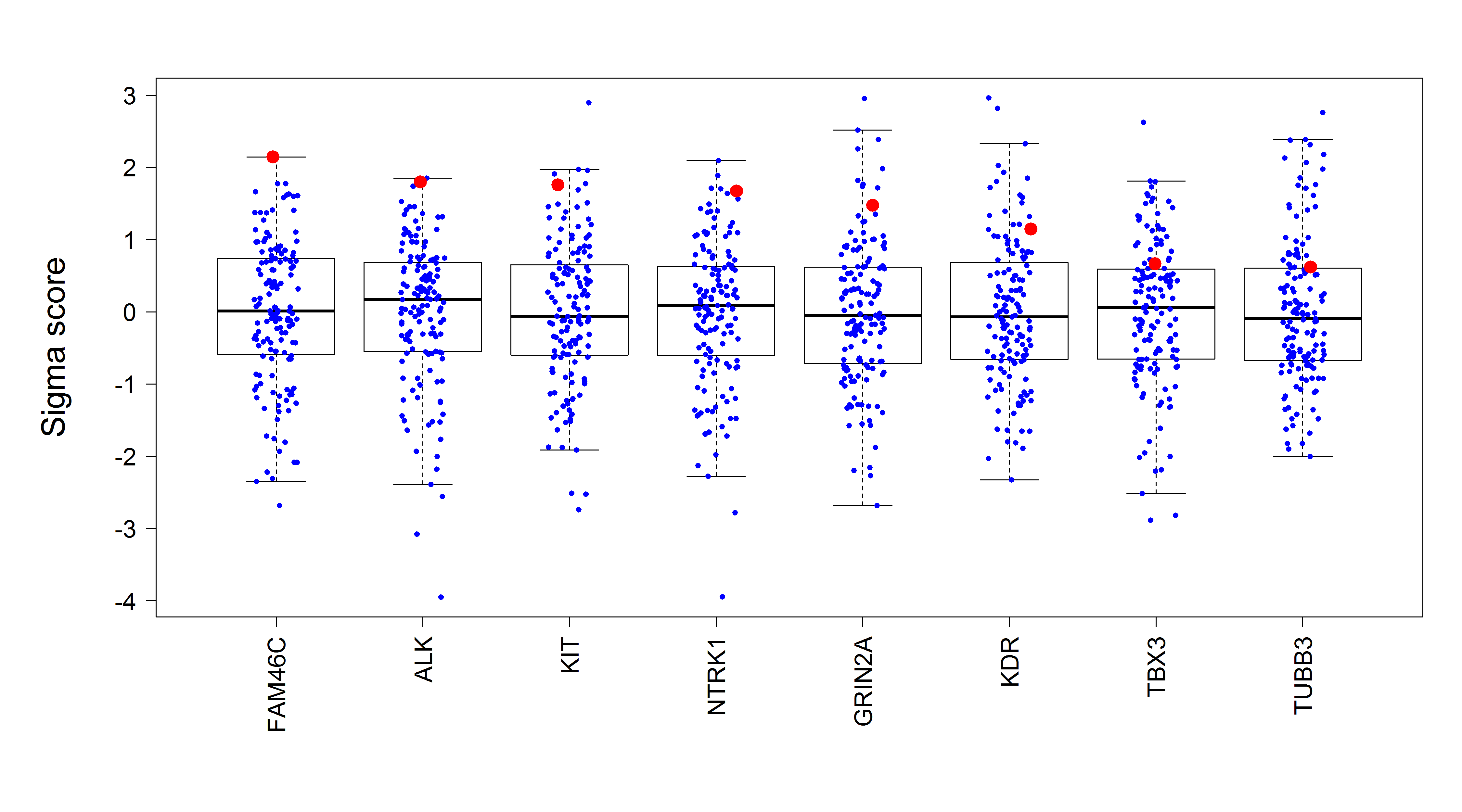
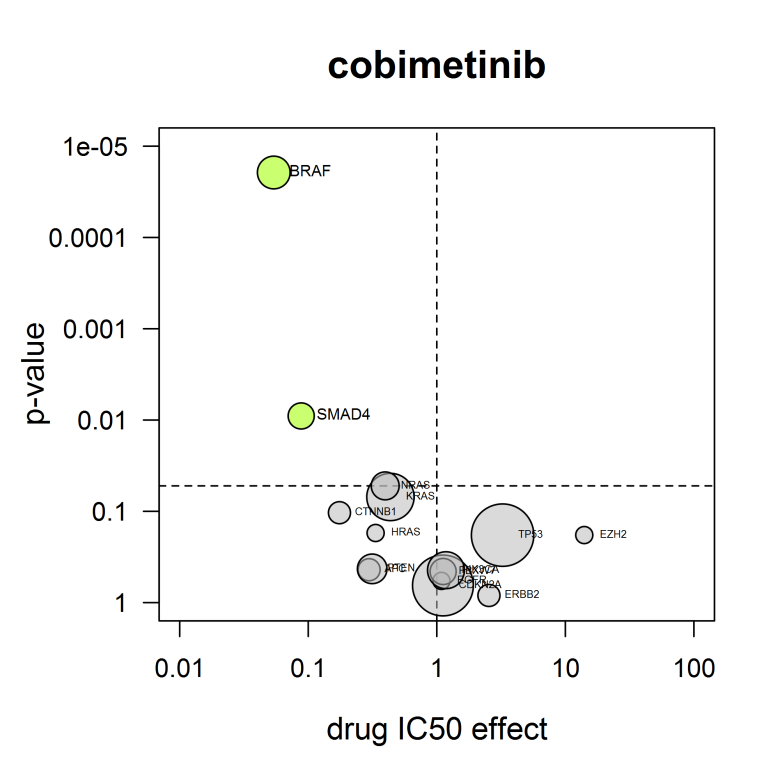
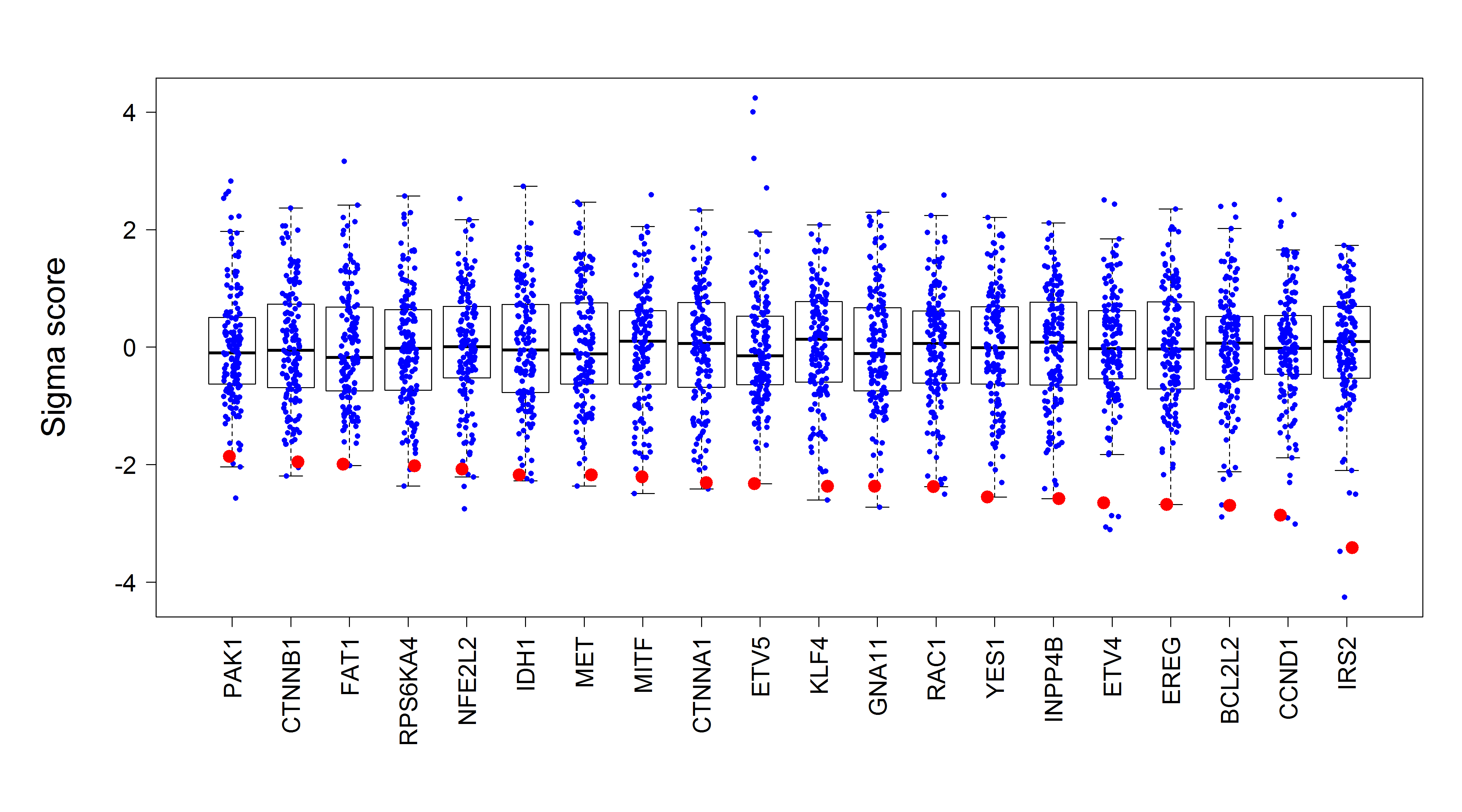
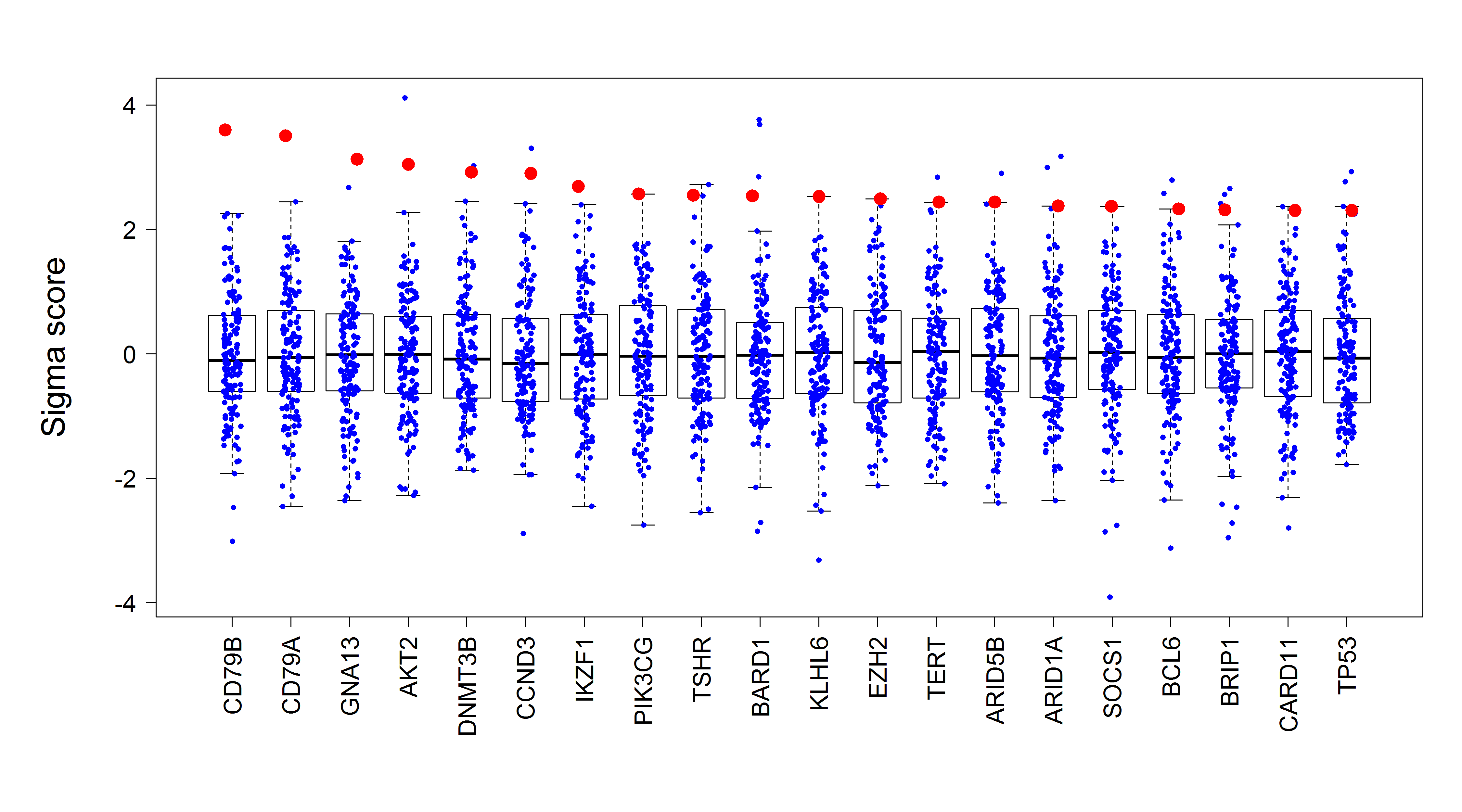


**Figure S3J.** Response biomarker analysis of neratinib. The volcano plot and a shortened version of the bottom boxplot are also presented in Figure 5 of the main text.

**Figure S3I.** Response biomarker analysis of osimertinib. The volcano plot and a shortened version of the bottom boxplot are also presented in Figure 5 of the main text.

**J**

**I**

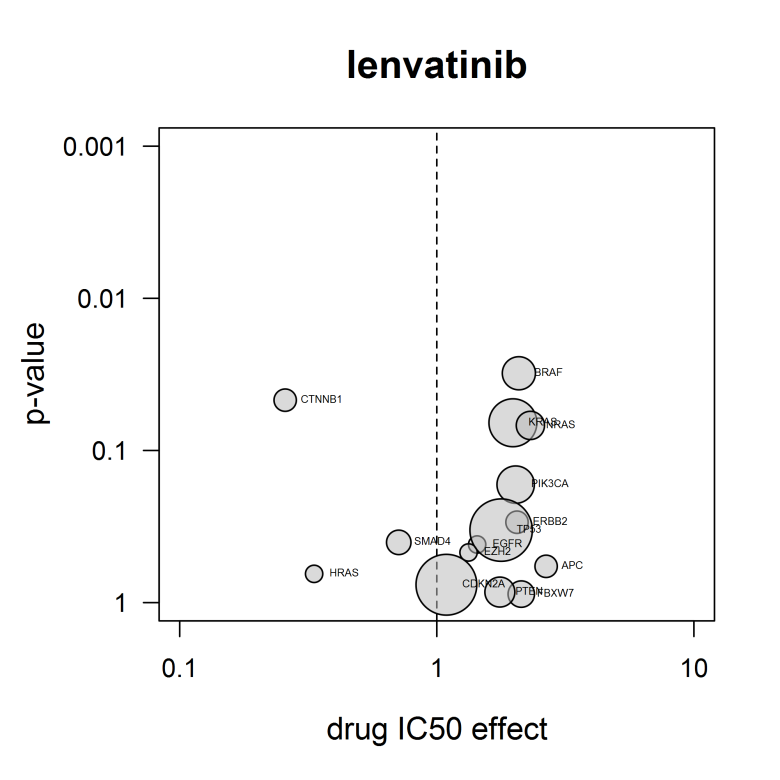
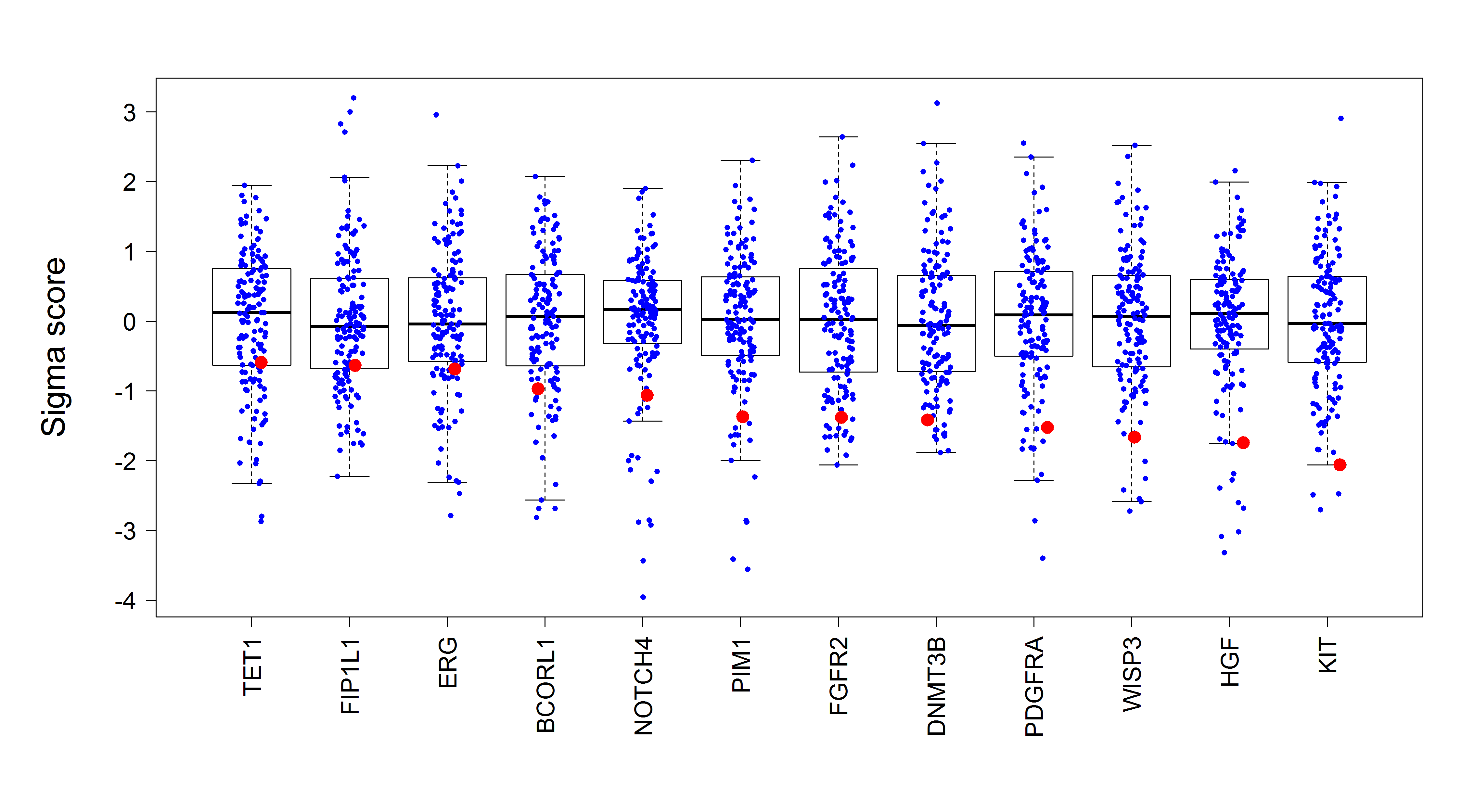
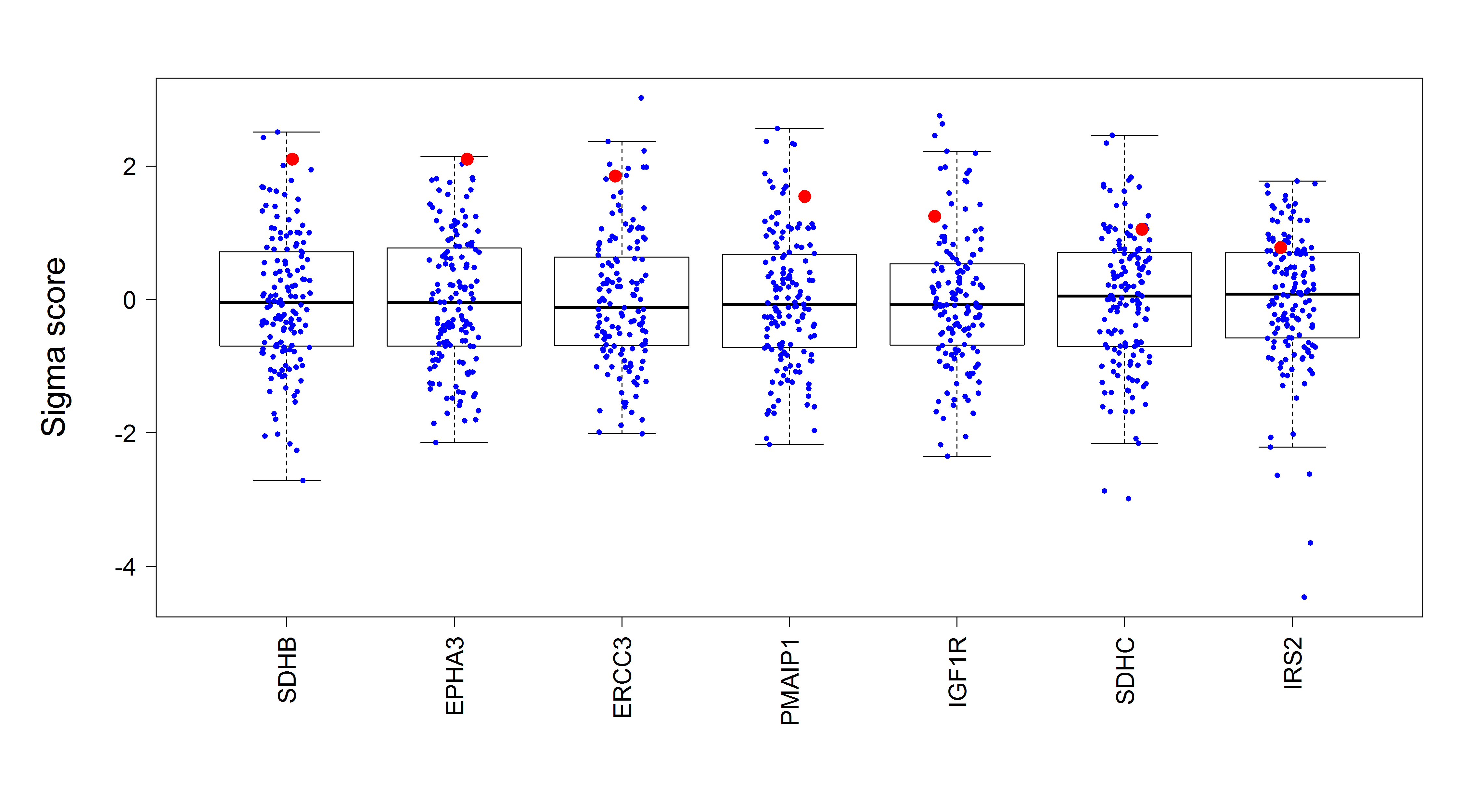
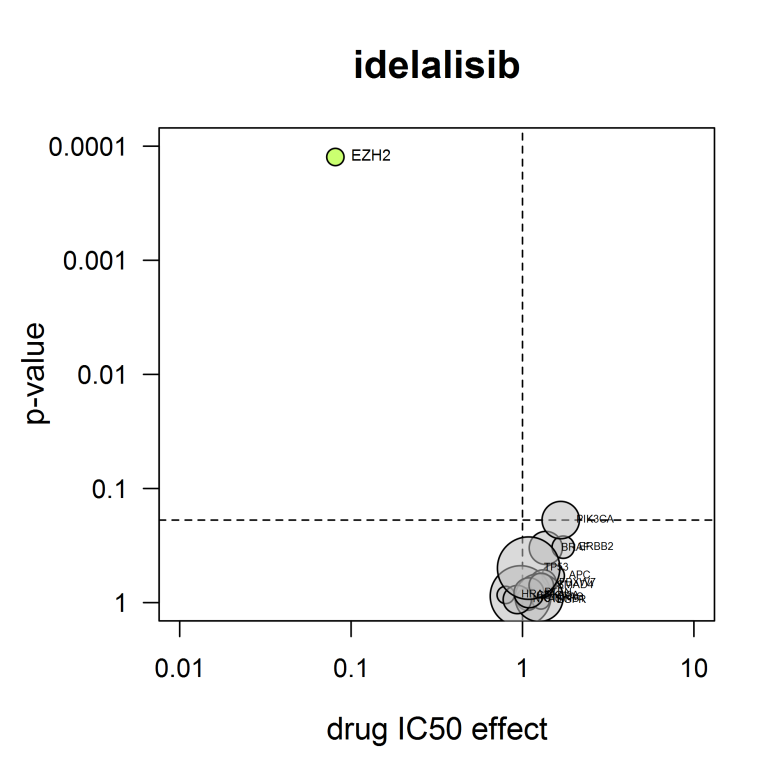
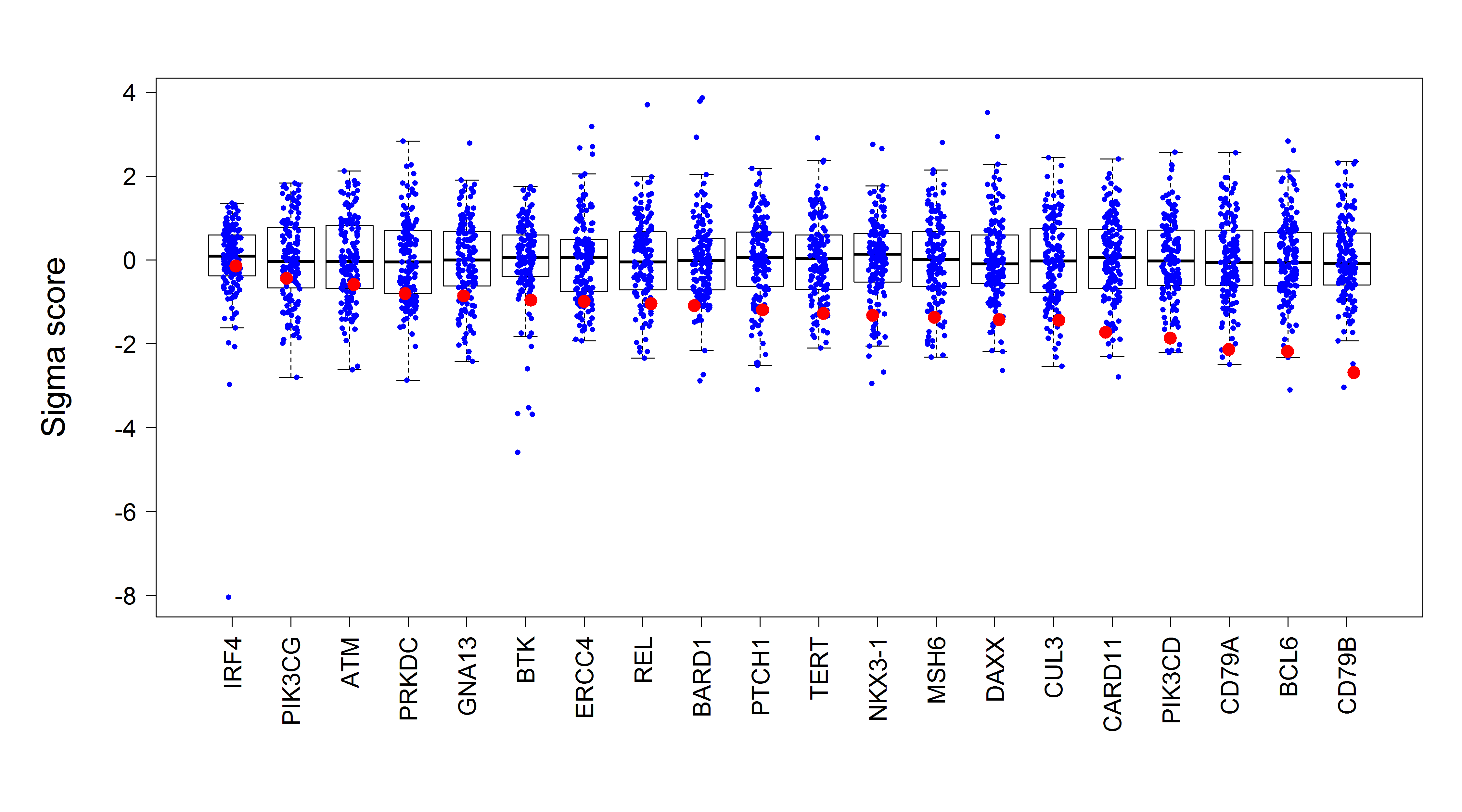
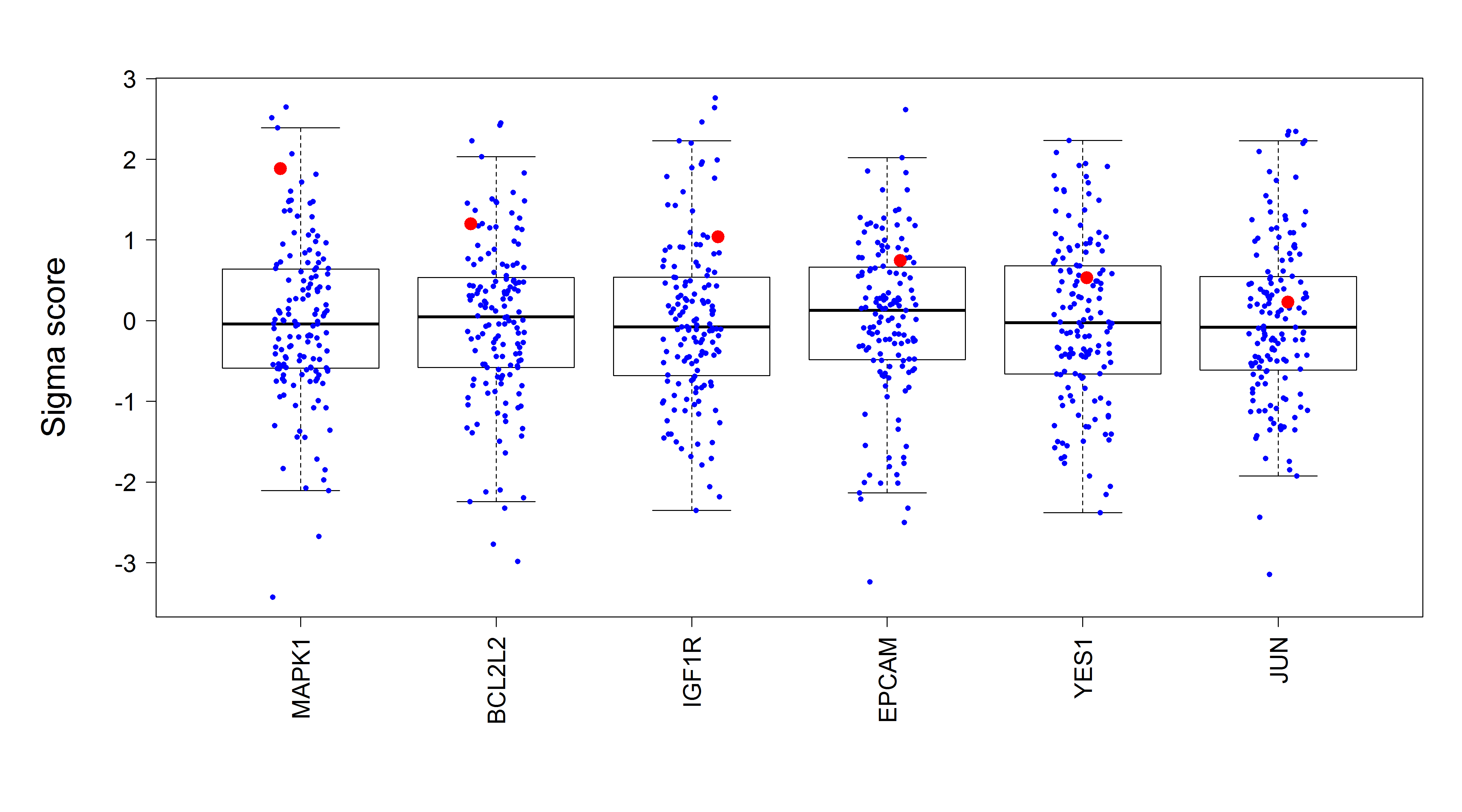


**Figure S3L.** Response biomarker analysis of copanlisib.

**L**

**Figure S3K.** Response biomarker analysis of cobimetinib. The volcano plot and a shortened version of both boxplots are also presented in Figure 5 of the main text.

**K**

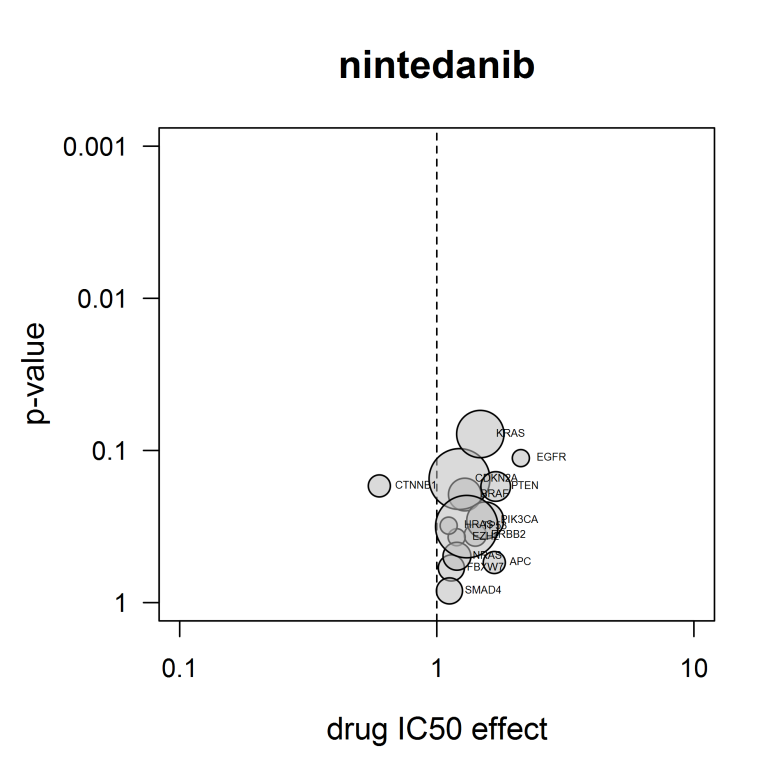
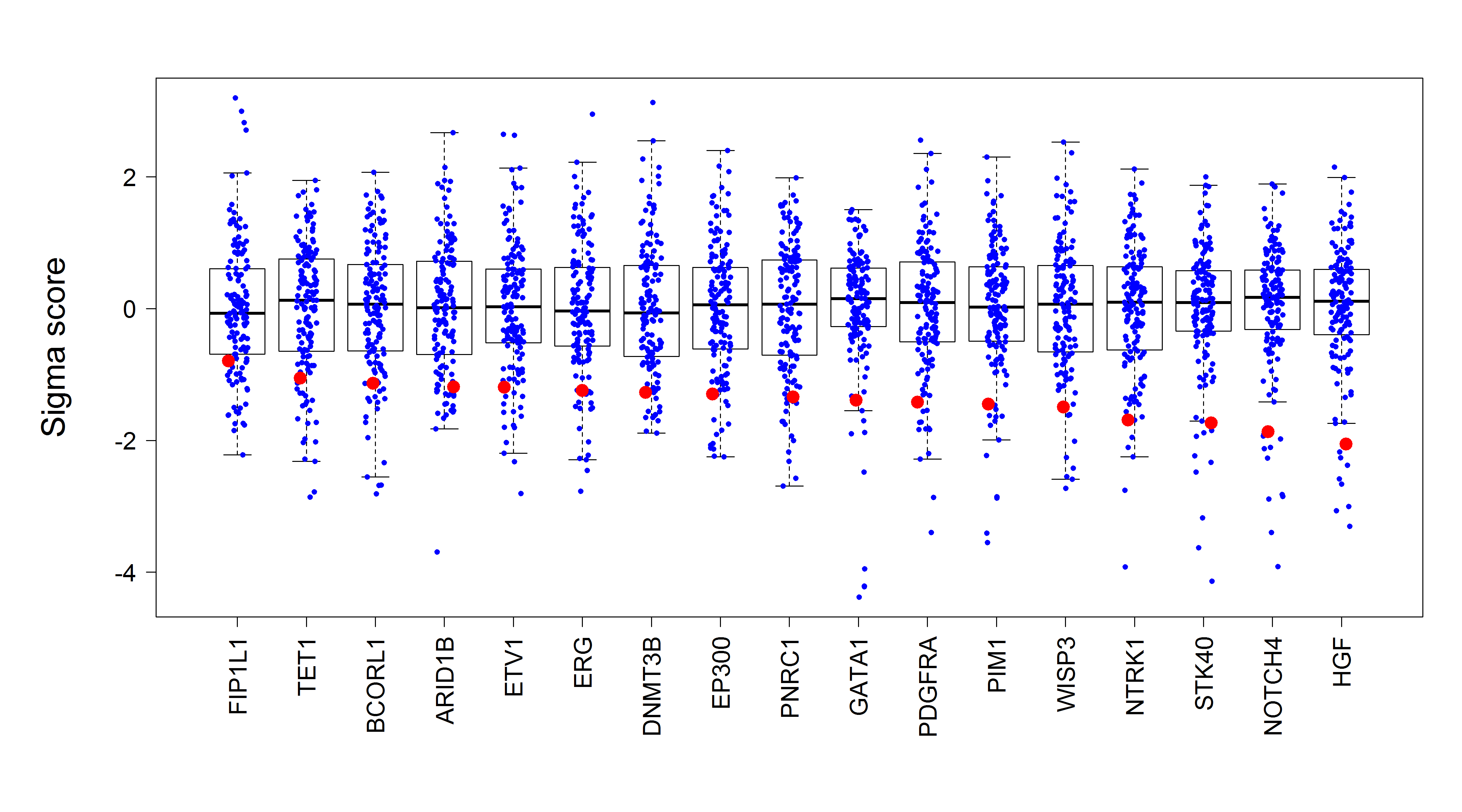
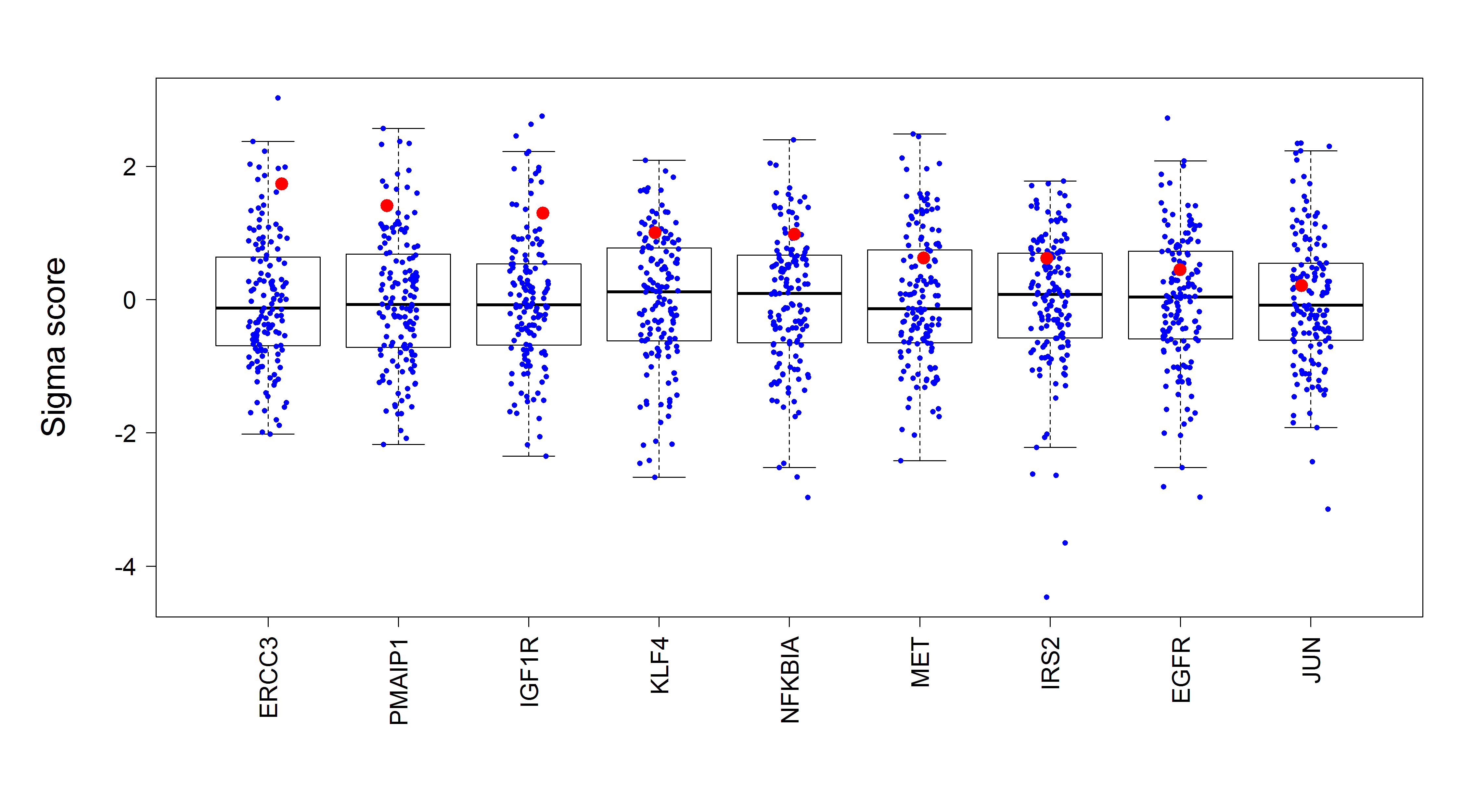
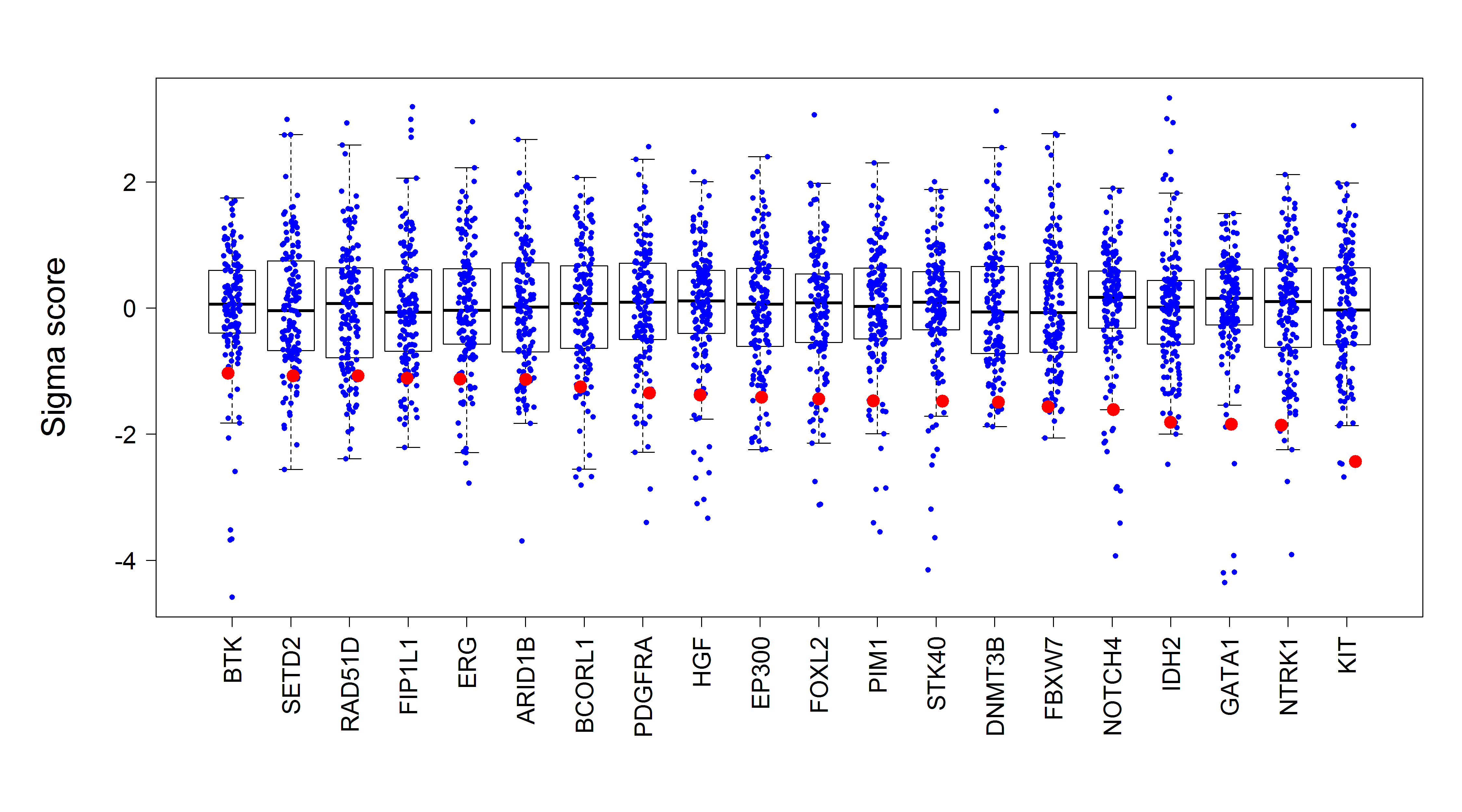
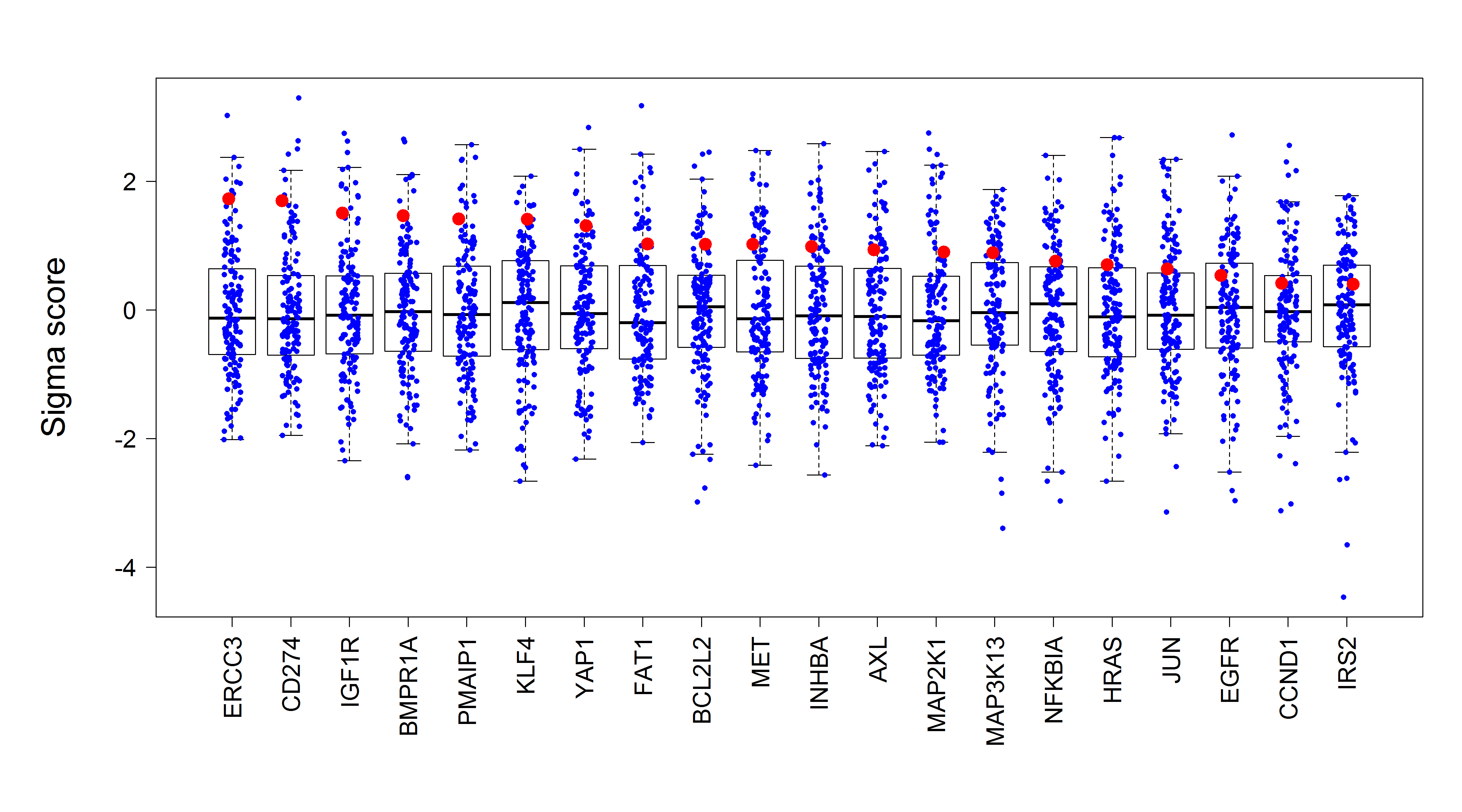
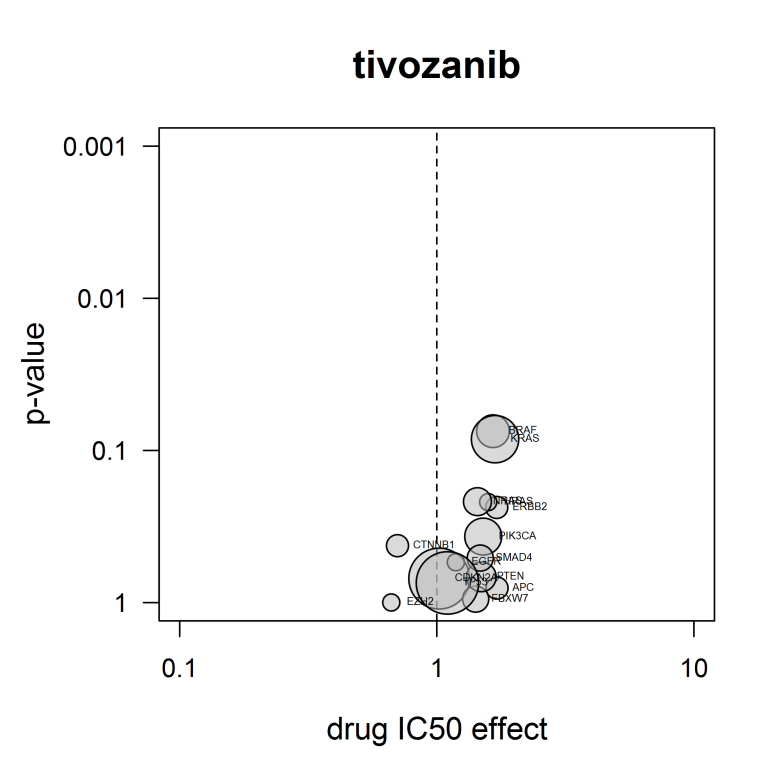


**Figure S3N.** Response biomarker analysis of lenvatinib.

**Figure S3M.** Response biomarker analysis of idelalisib.

**N**

**M**

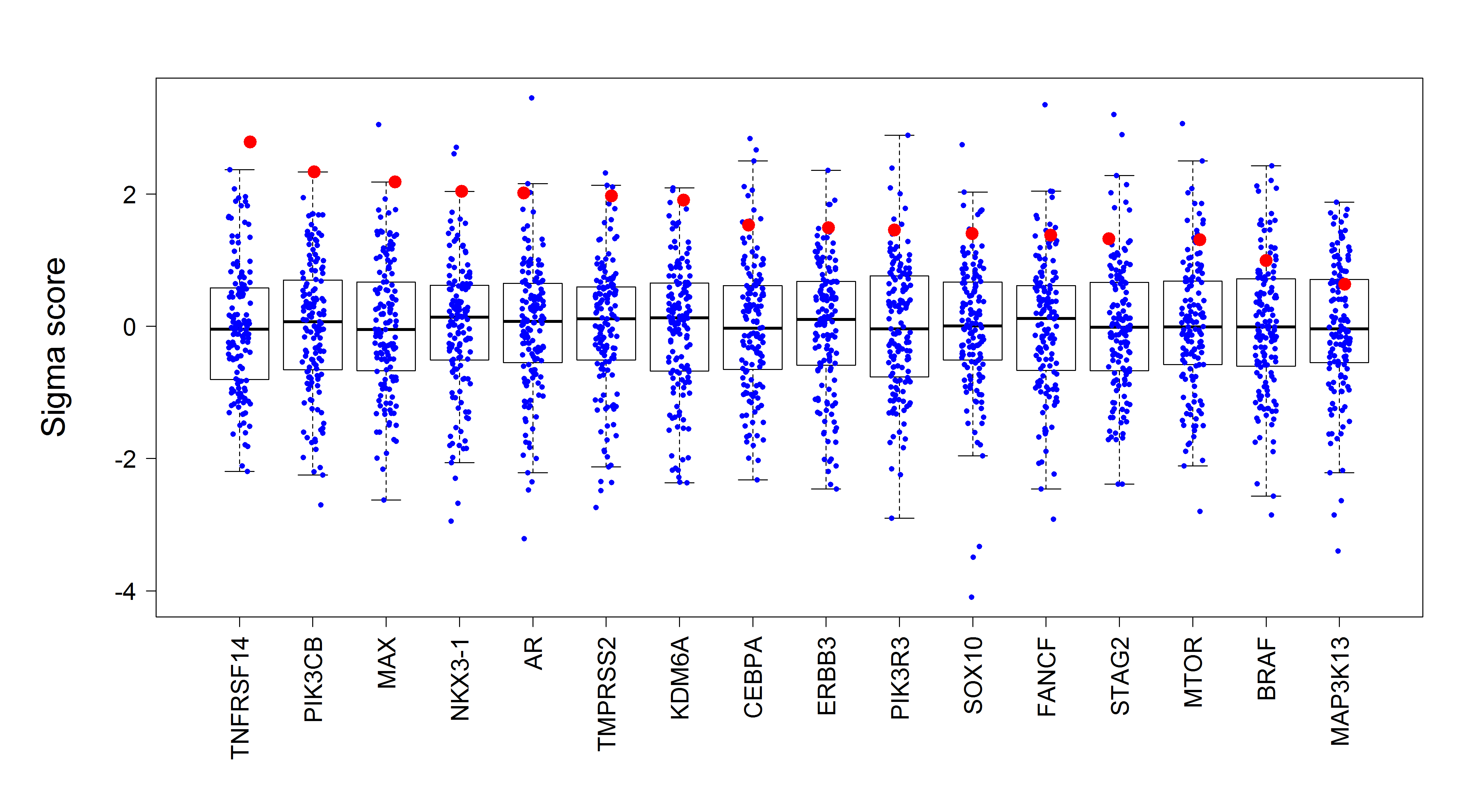
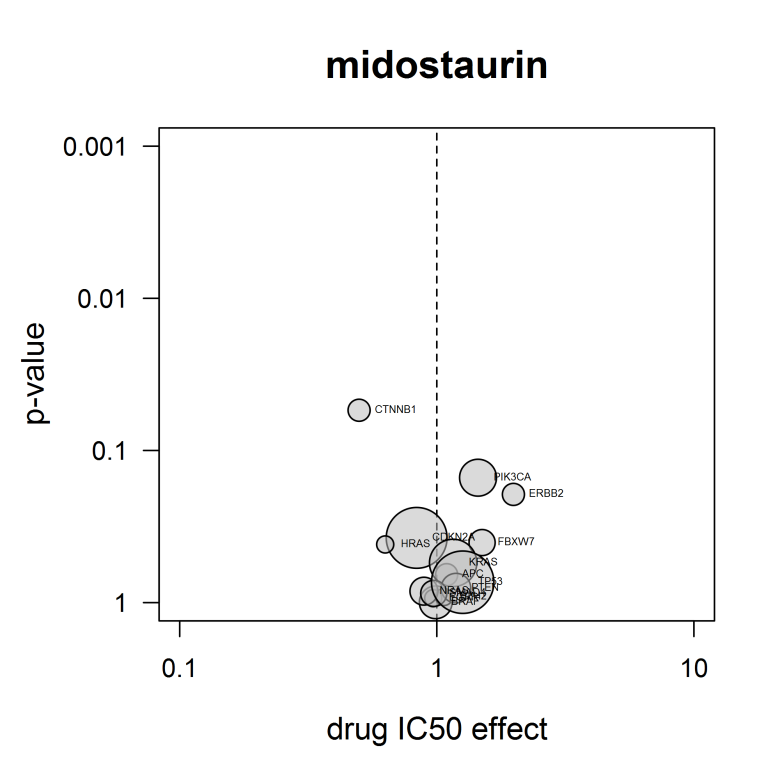


**Figure S3O.** Response biomarker analysis of nintedanib.

**Figure S3P.** Response biomarker analysis of tivozanib.

**P**

**O**



**Figure S3Q.** Response biomarker analysis of midostaurin.

**Q**