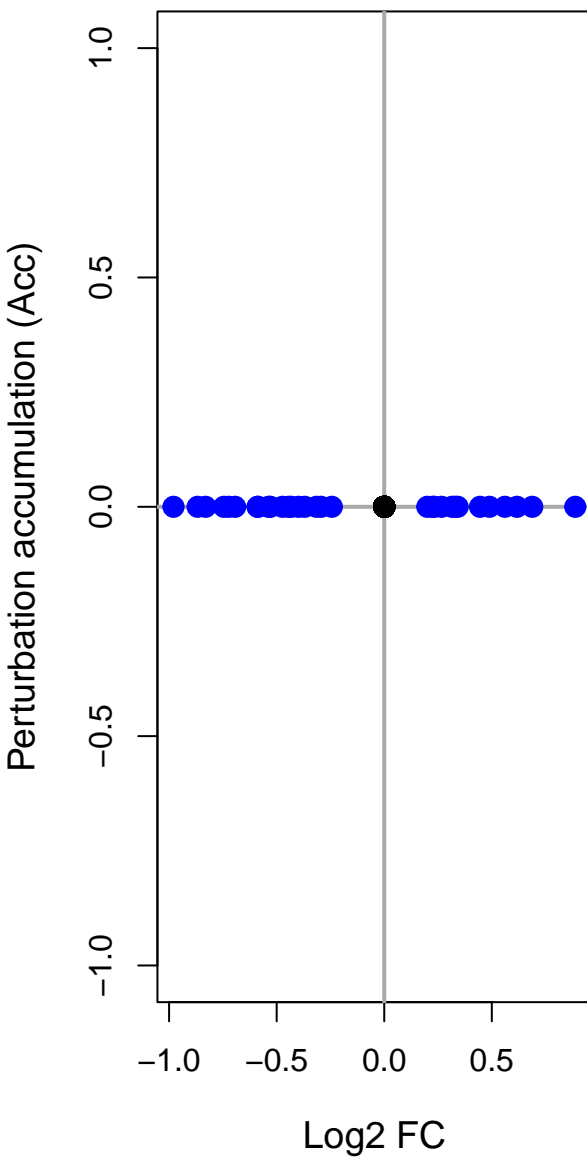
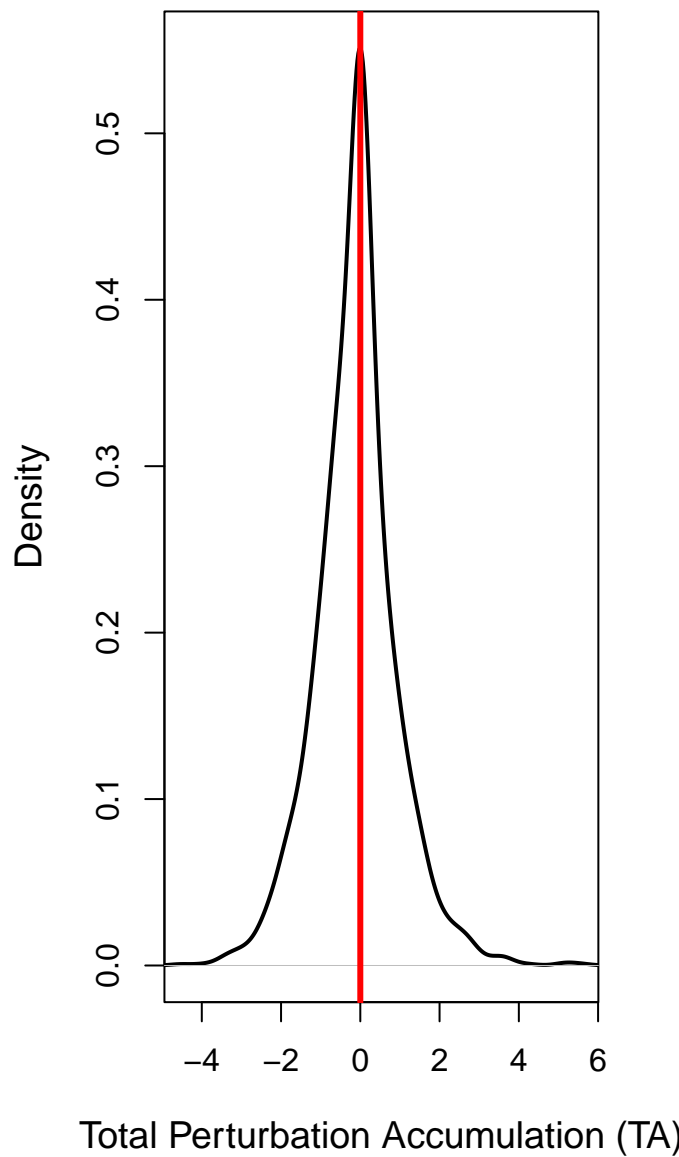


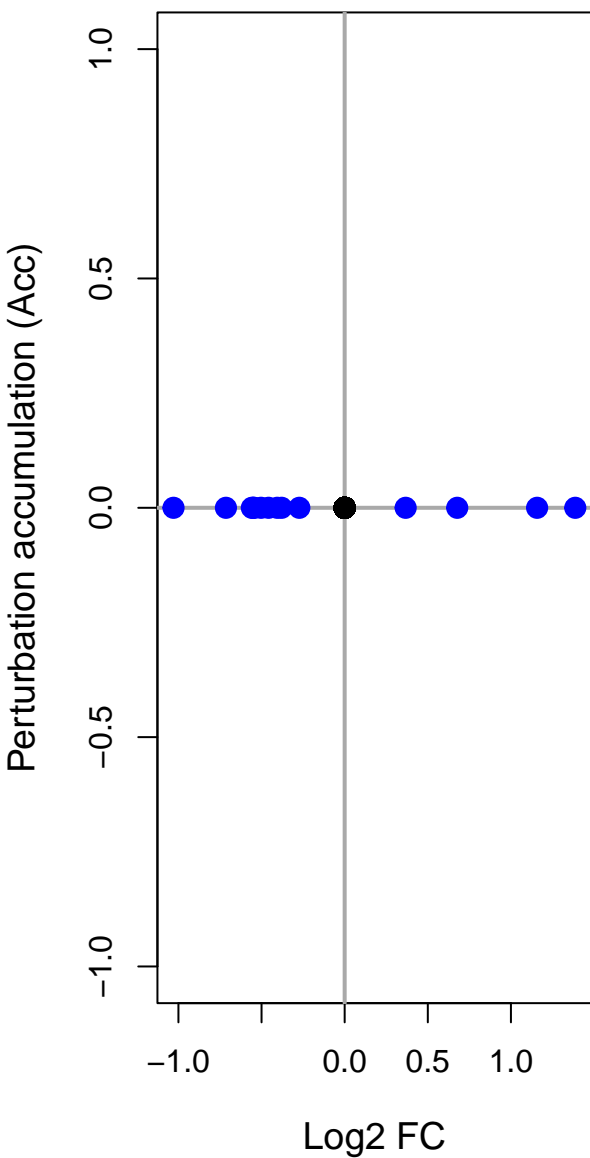
pathway ID=03013



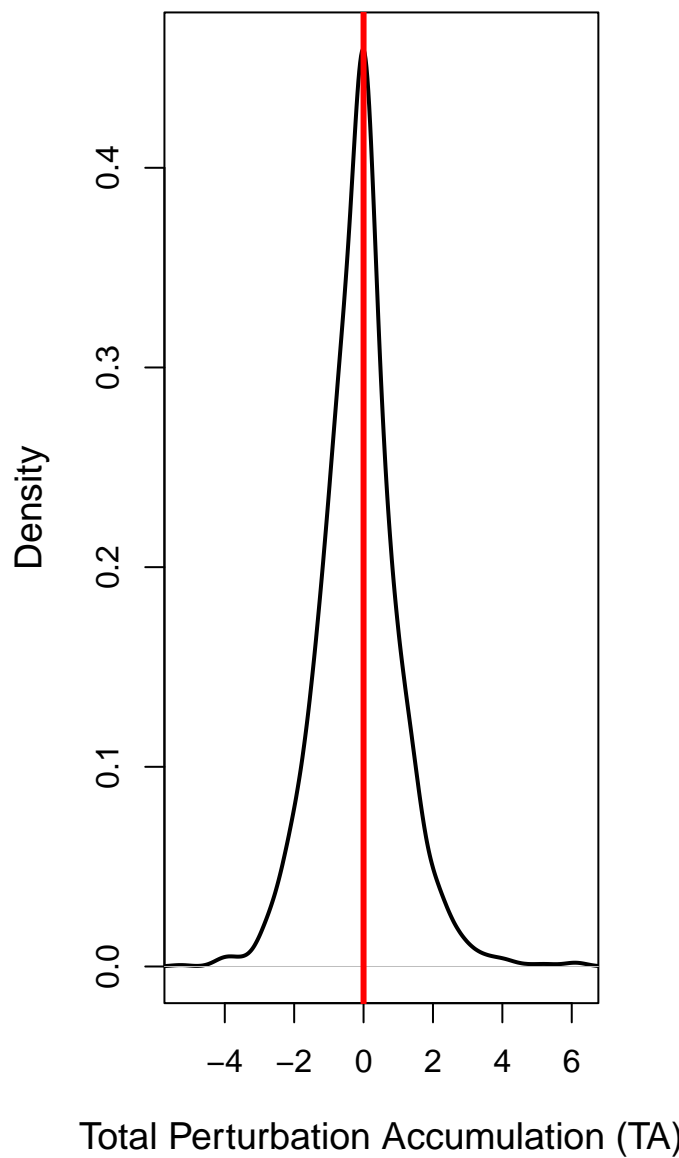
pathway ID=03013 P PERT=1



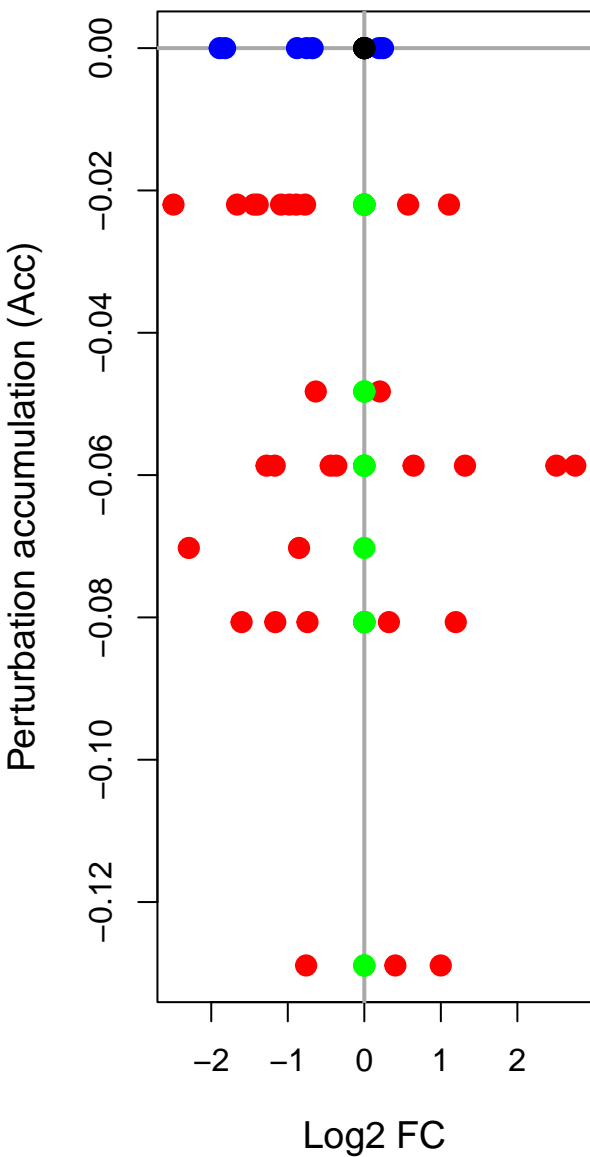
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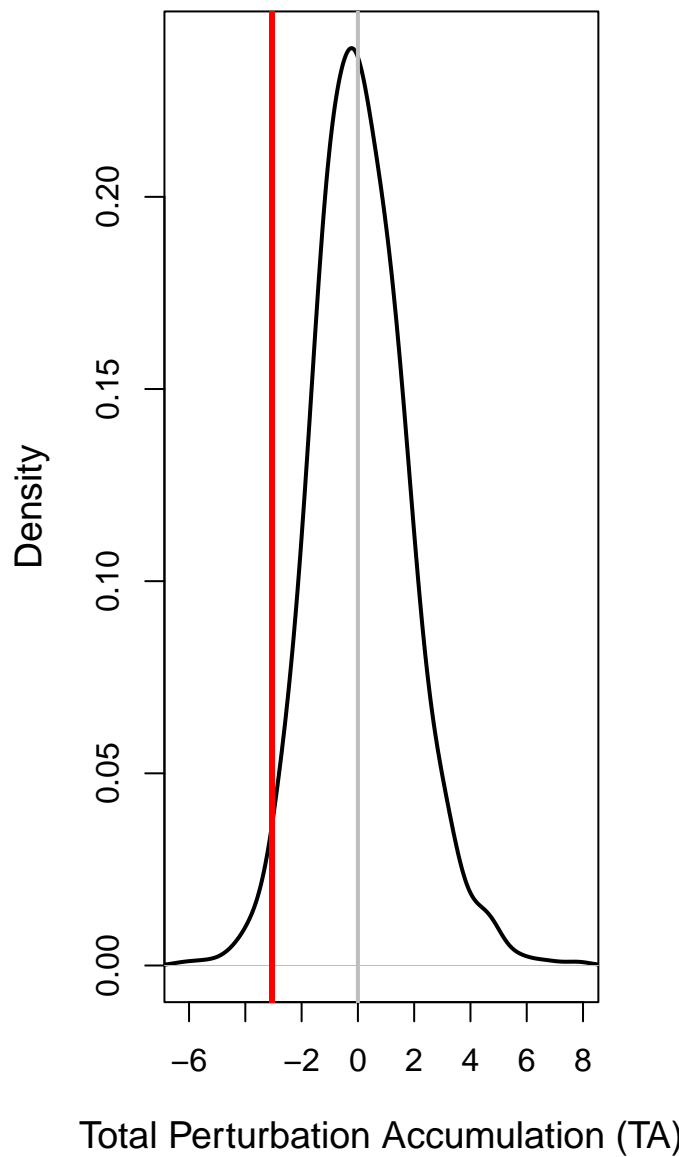
pathway ID=03018 P PERT=1



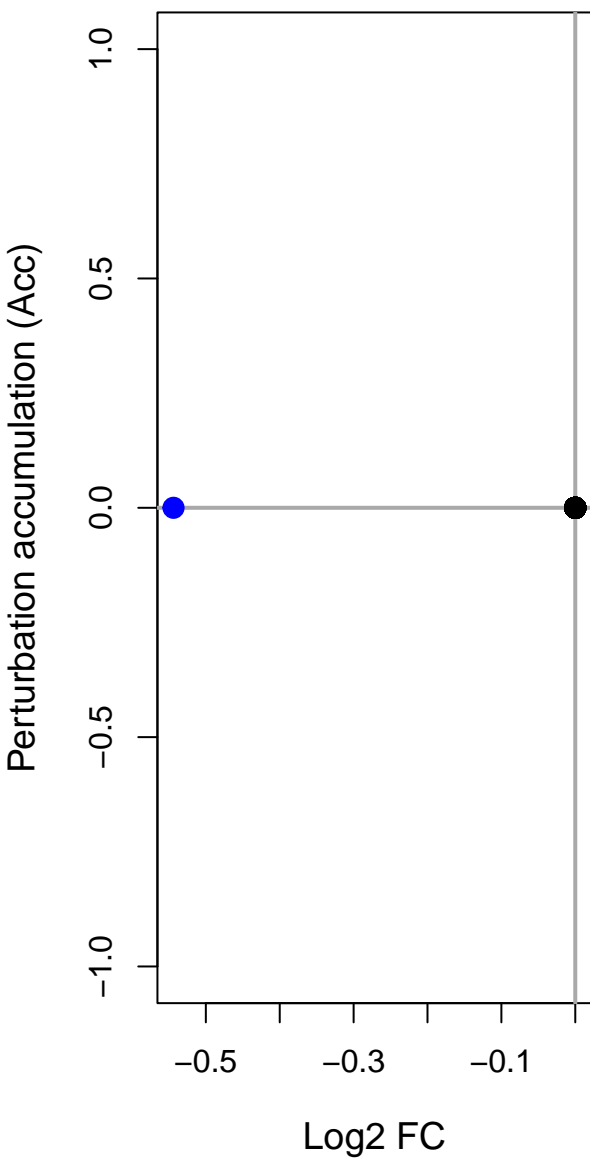
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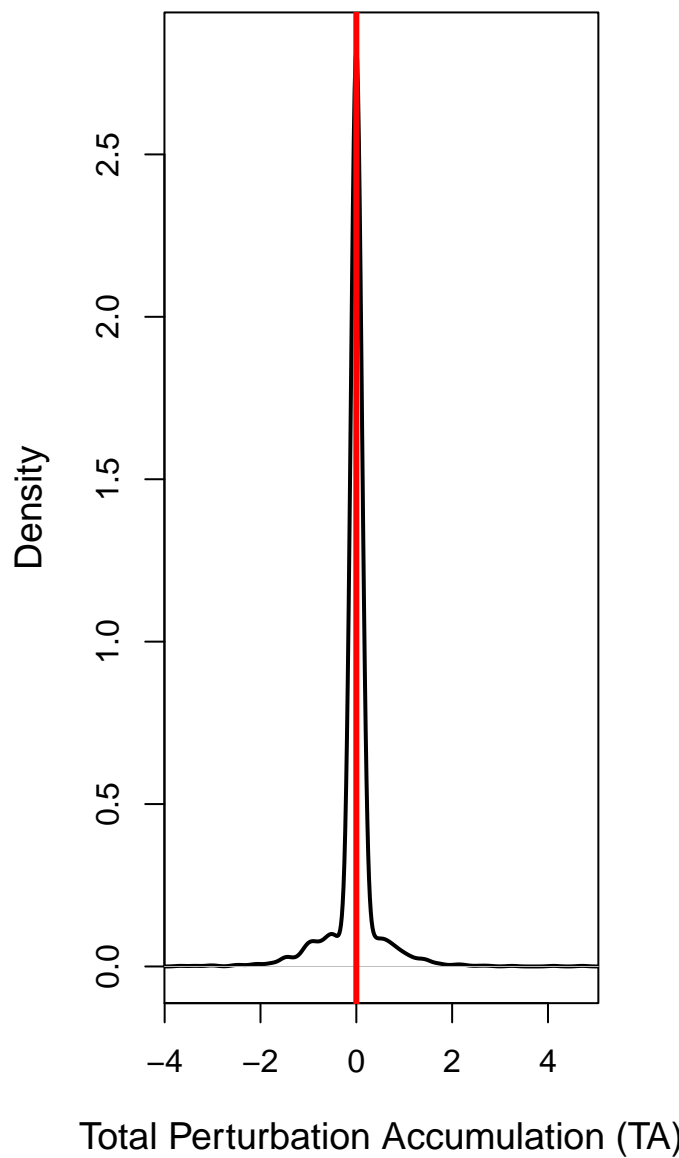
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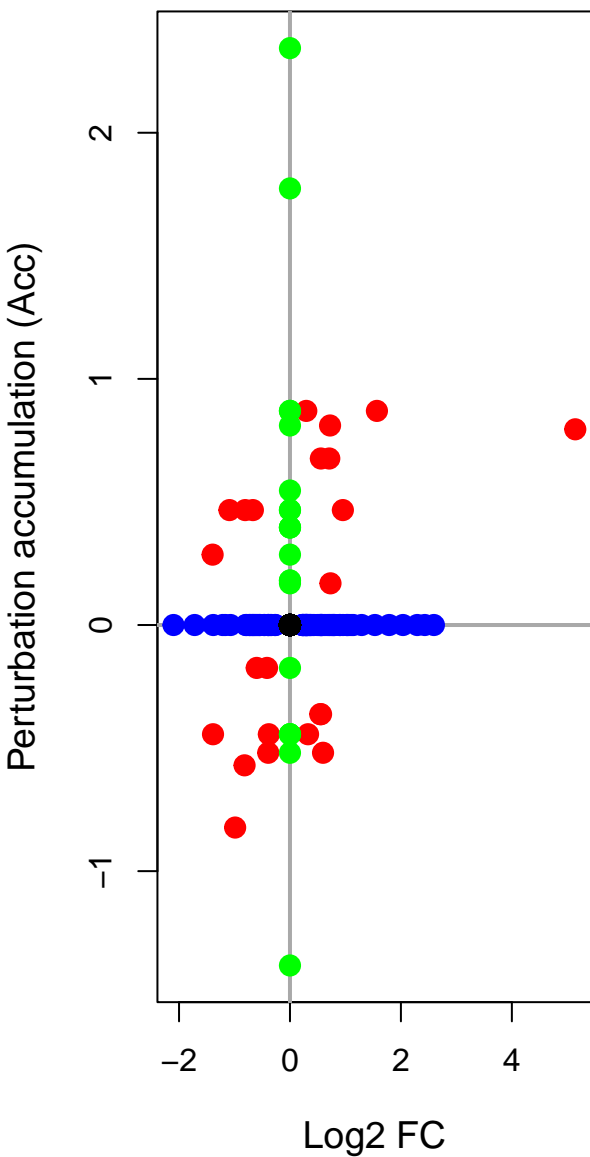
pathway ID=03460



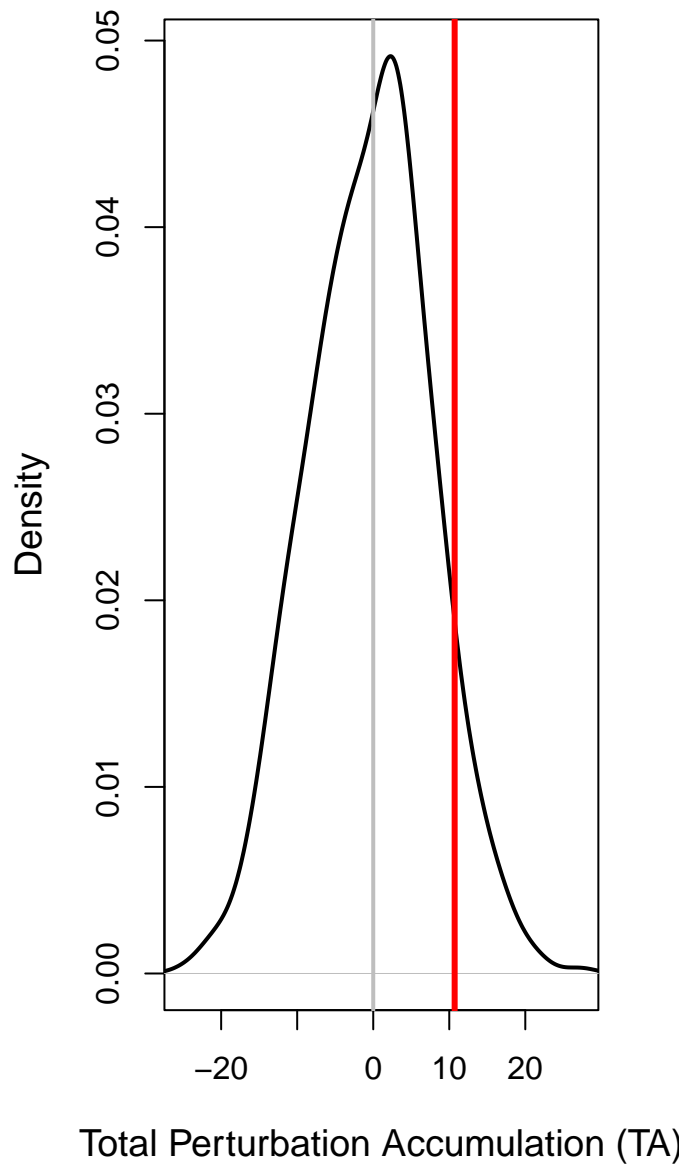
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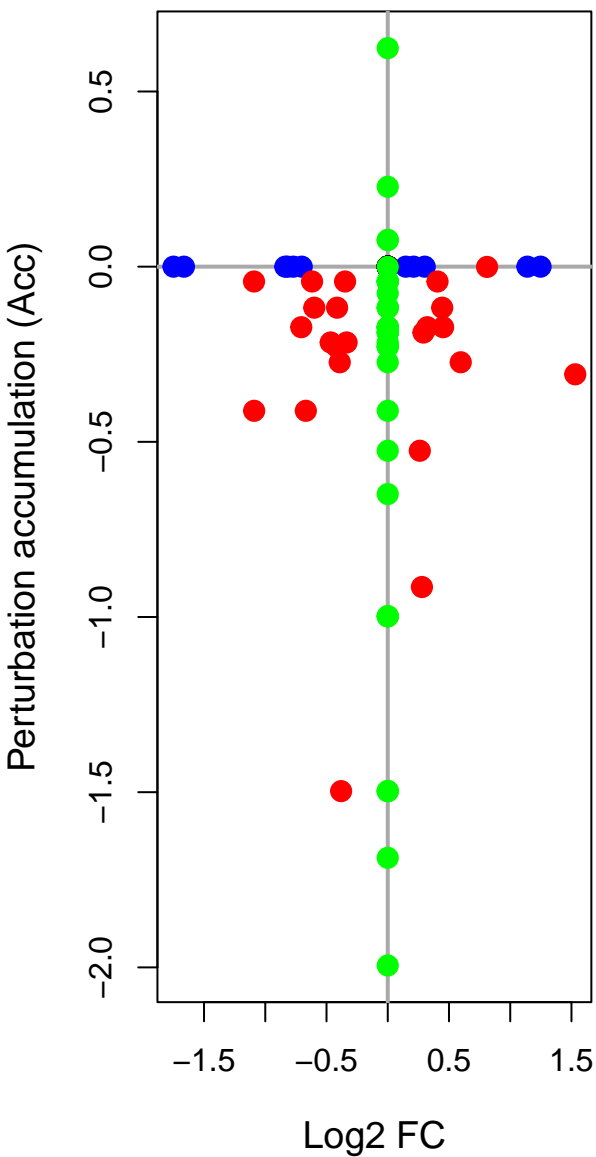
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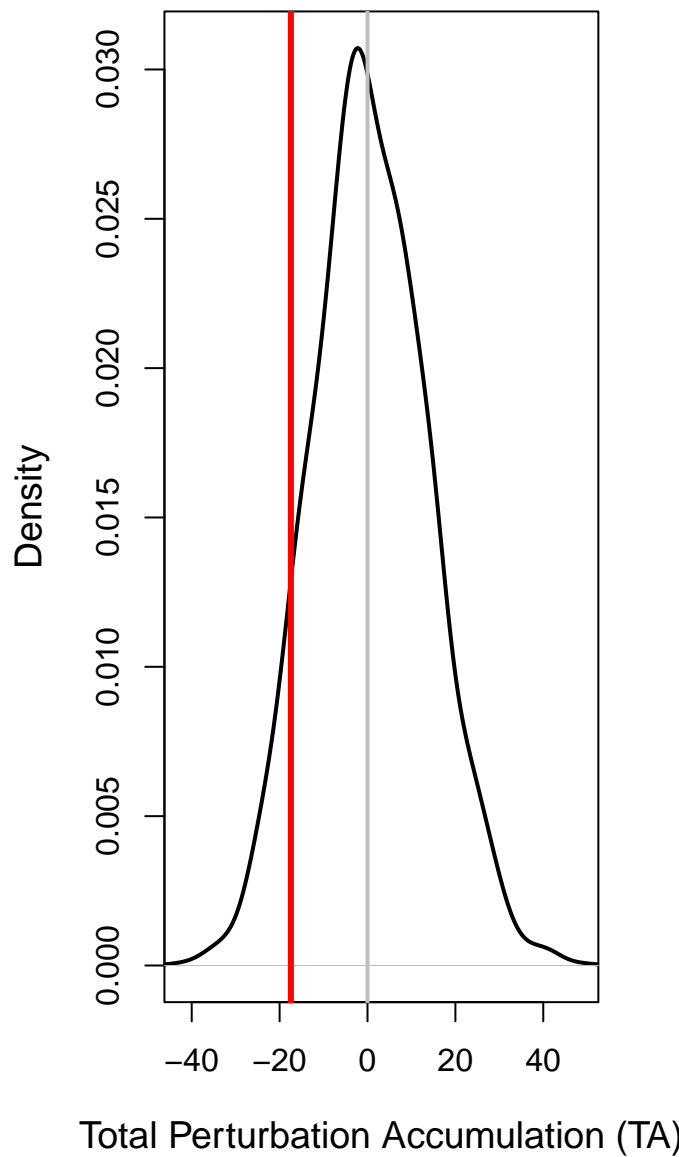
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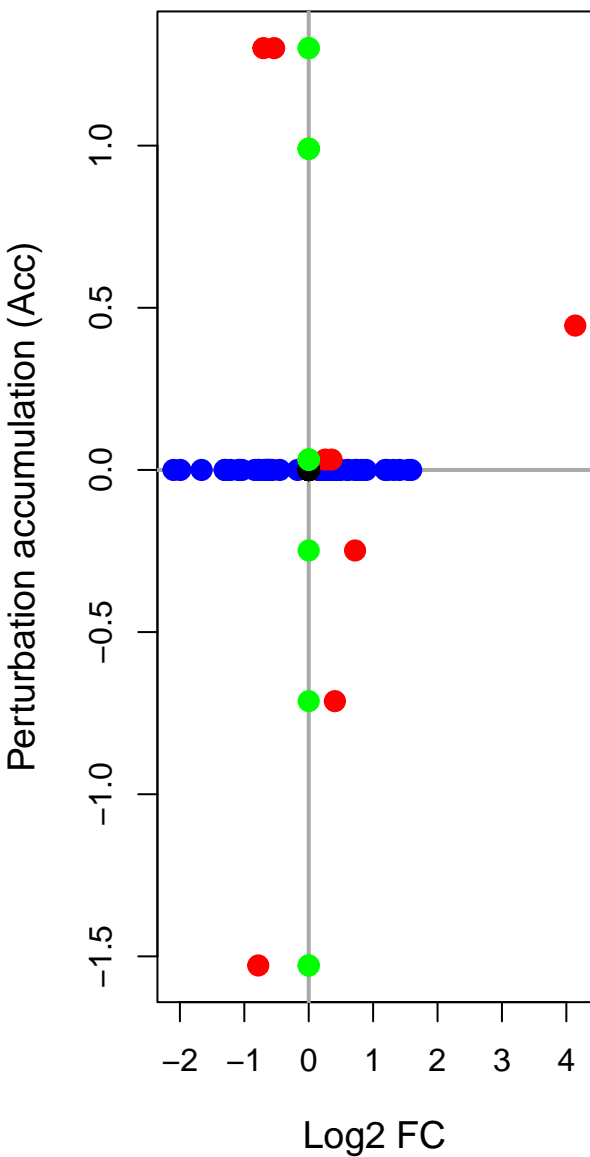
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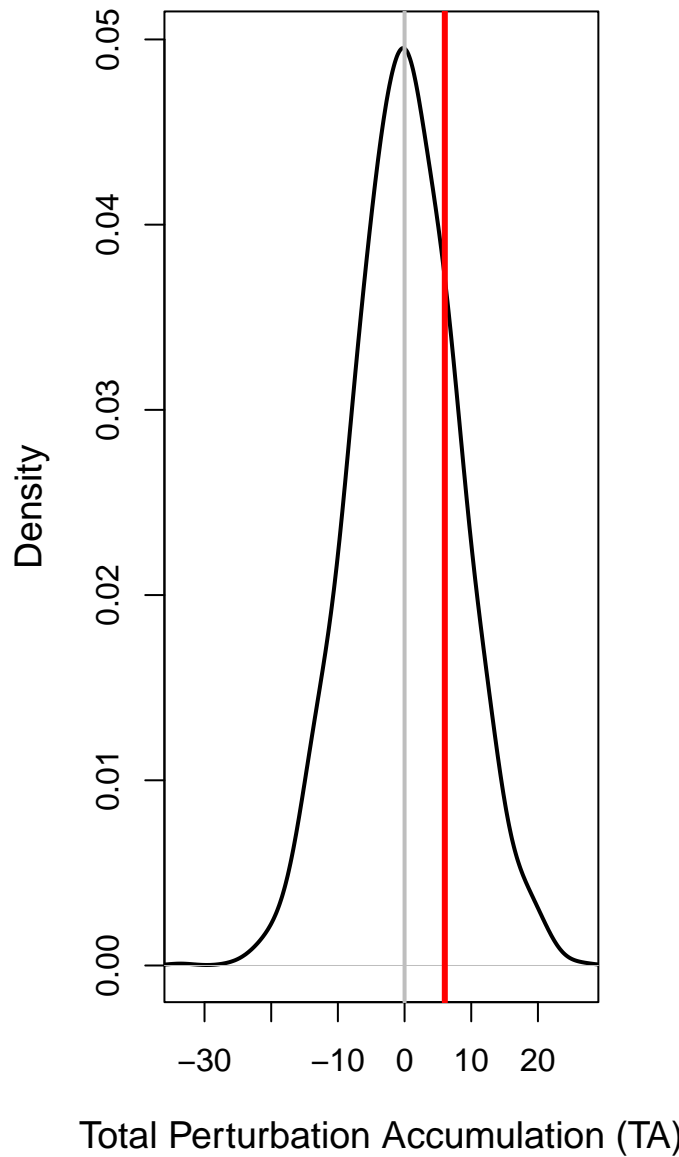
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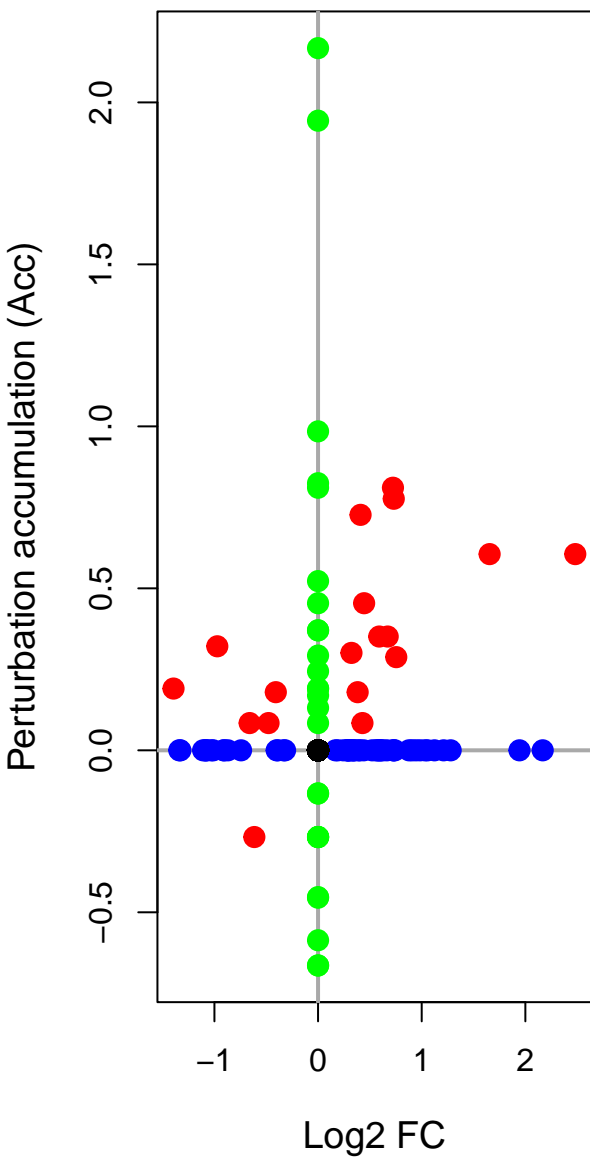
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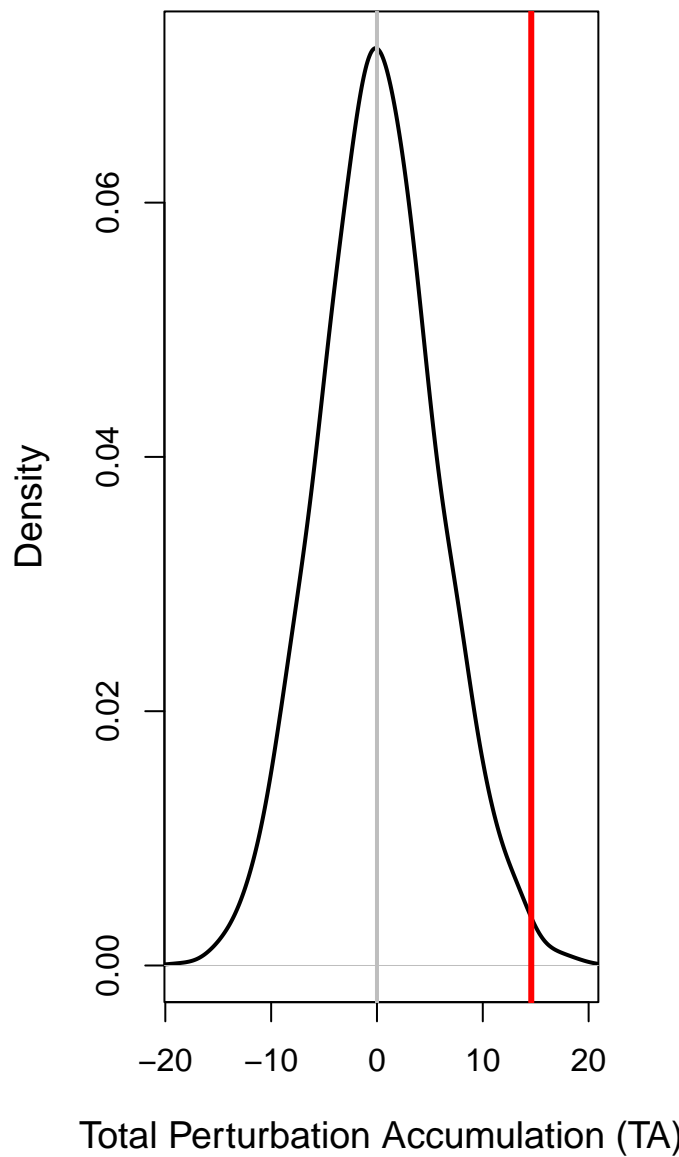
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pathway ID=04060

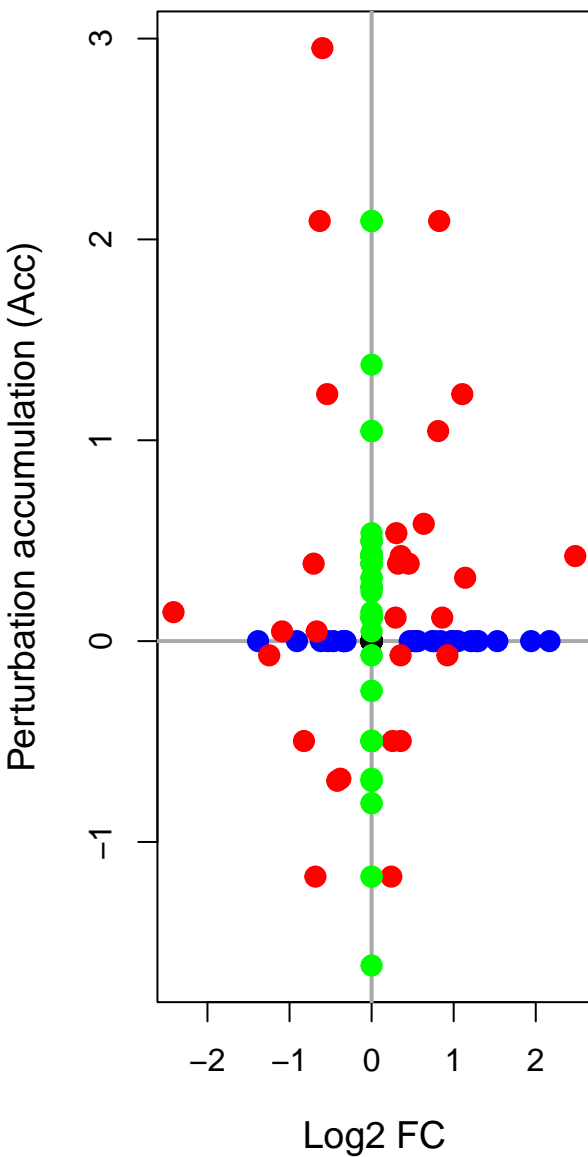


pathway ID=04060 P PERT=0.01

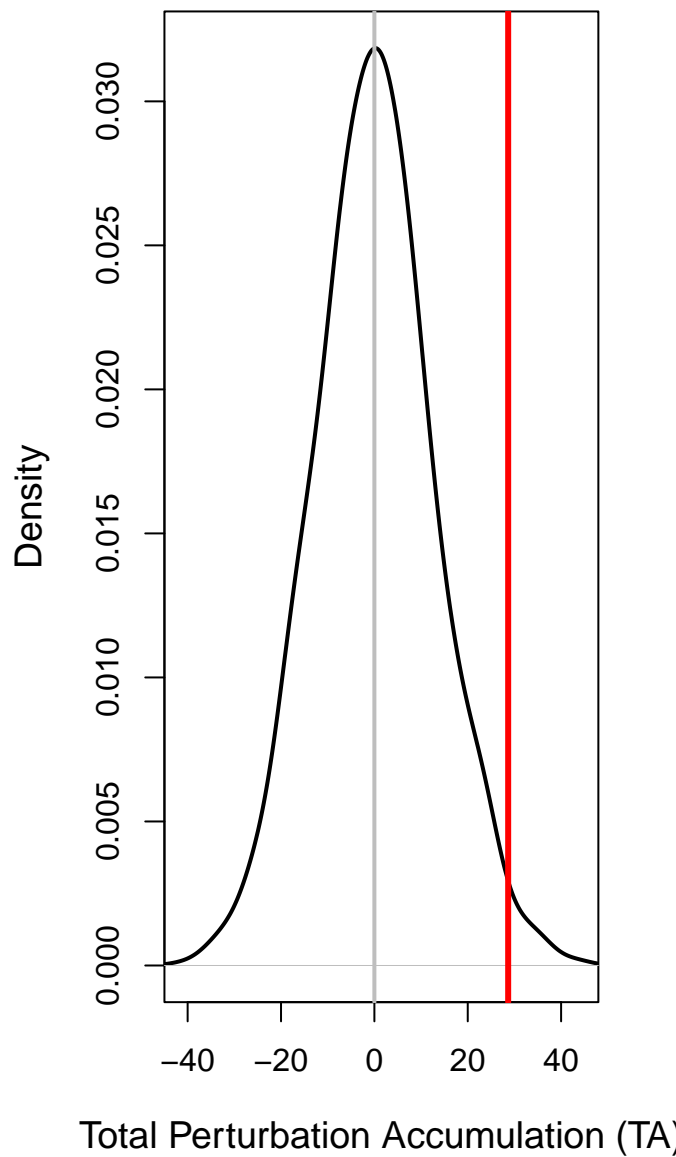




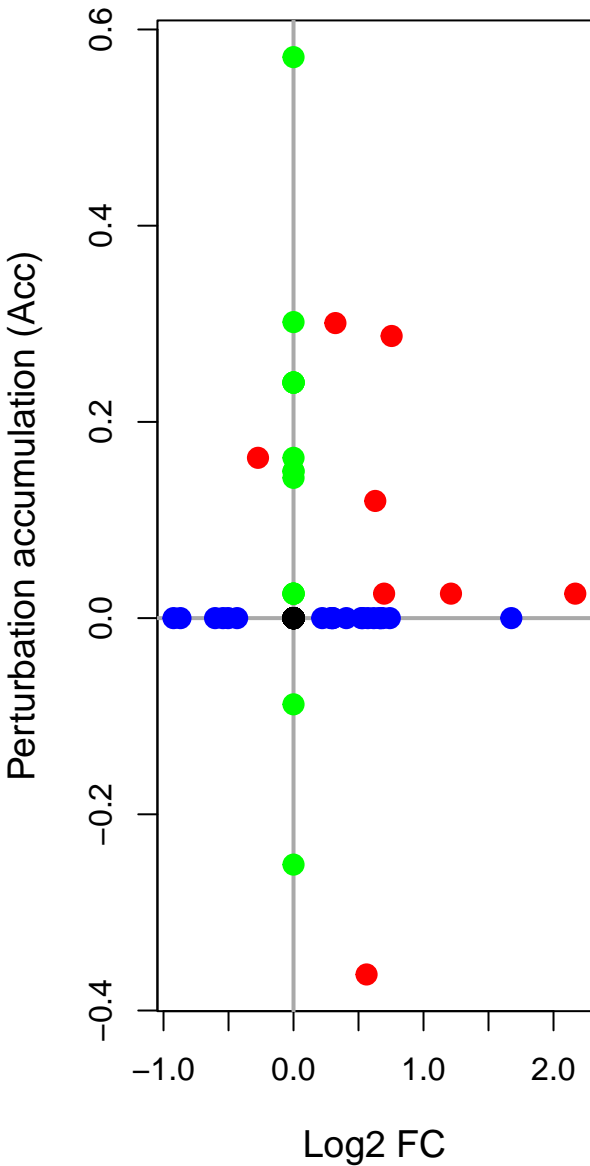
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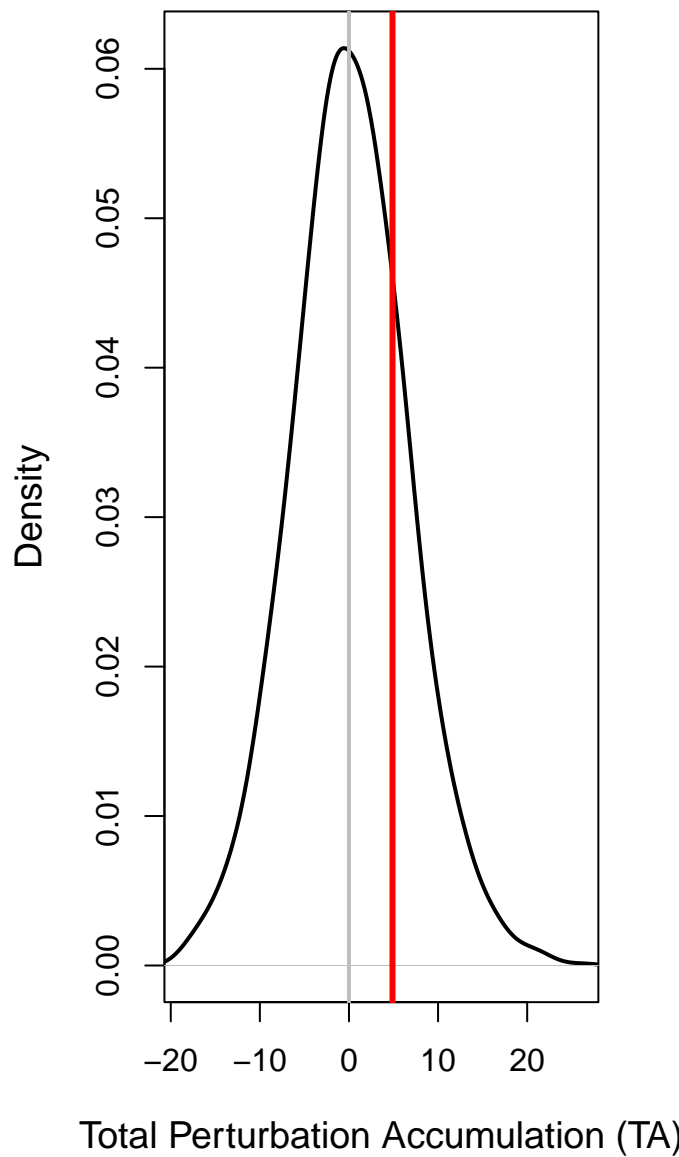
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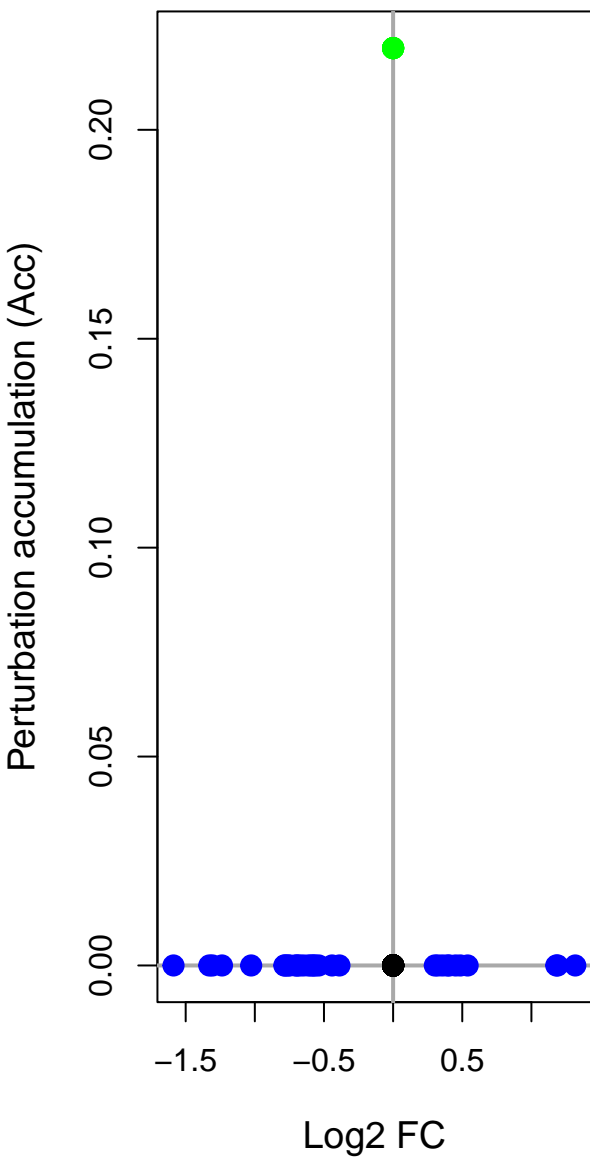
**pathway ID=04064**



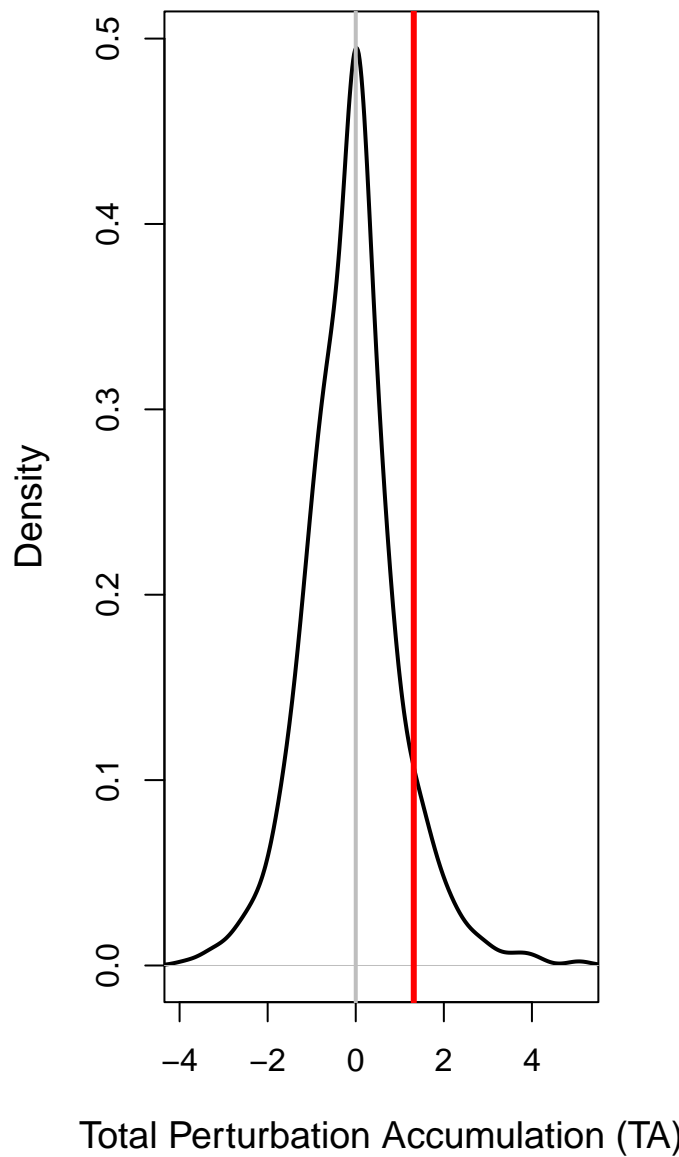
pathway ID=04064 P PERT=0.446



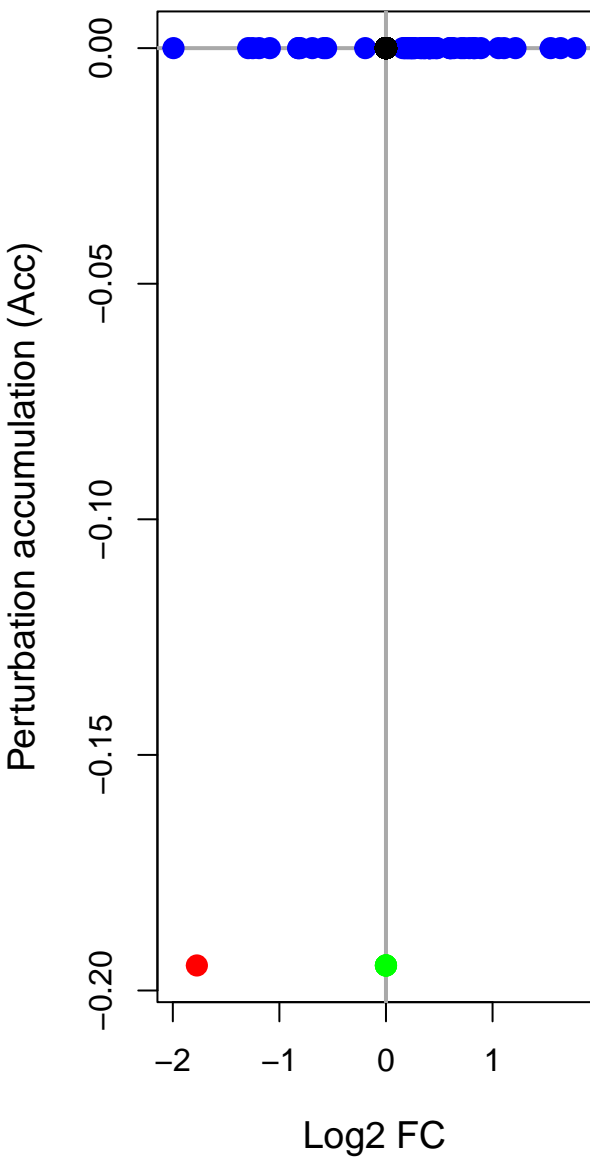
pathway ID=04070



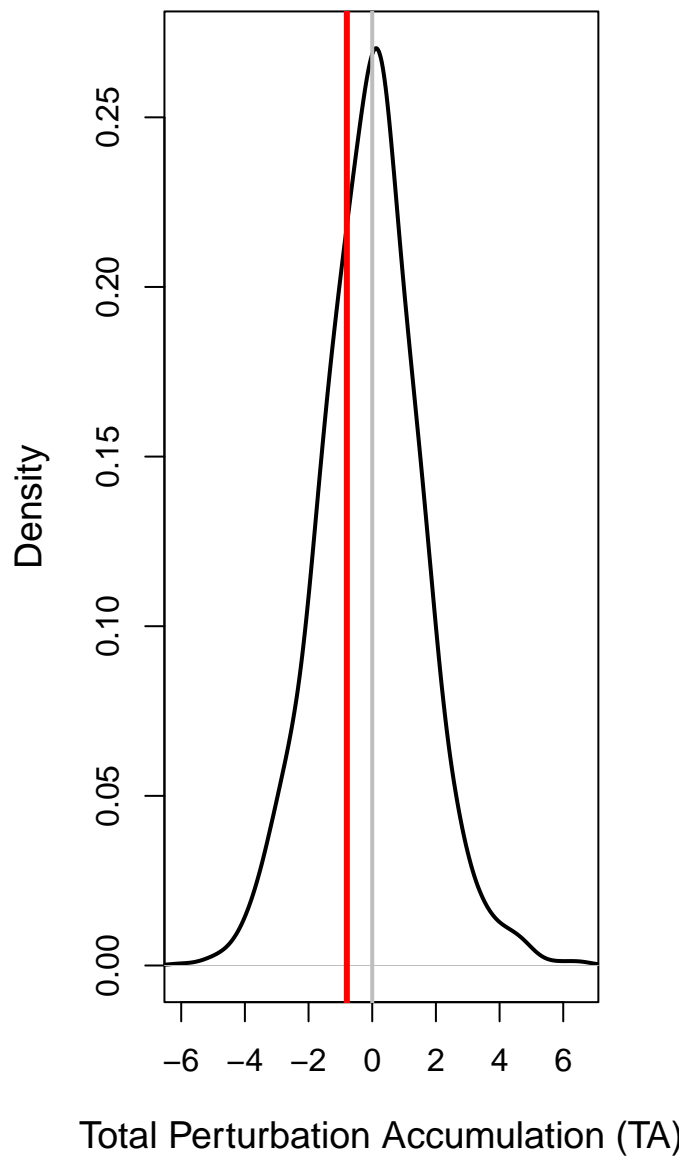
pathway ID=04070 P PERT=0.174



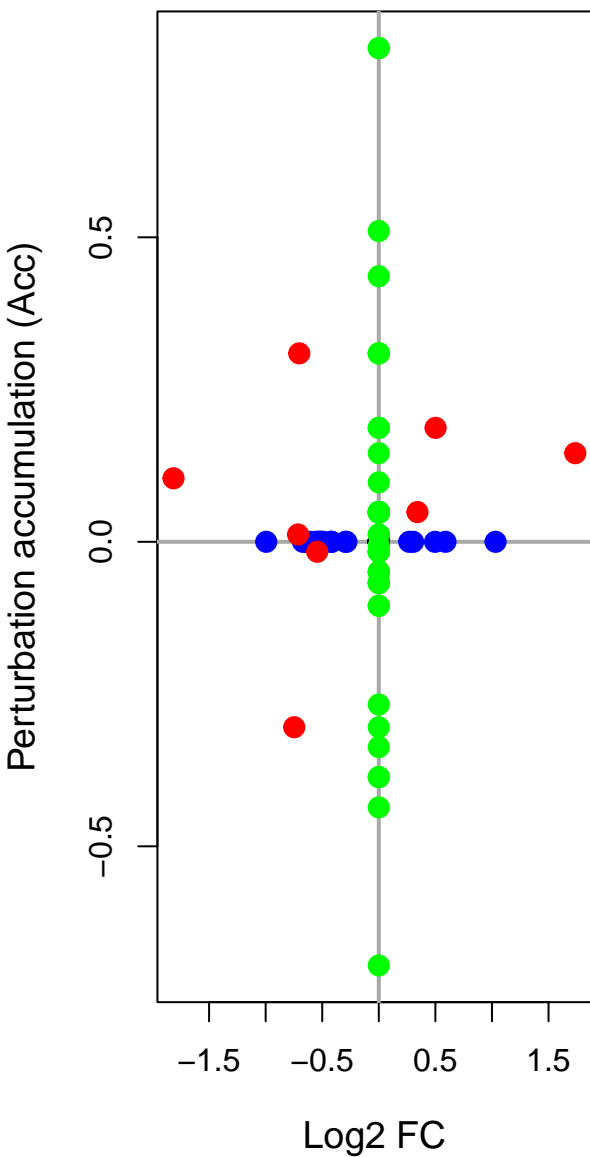
pathway ID=04080



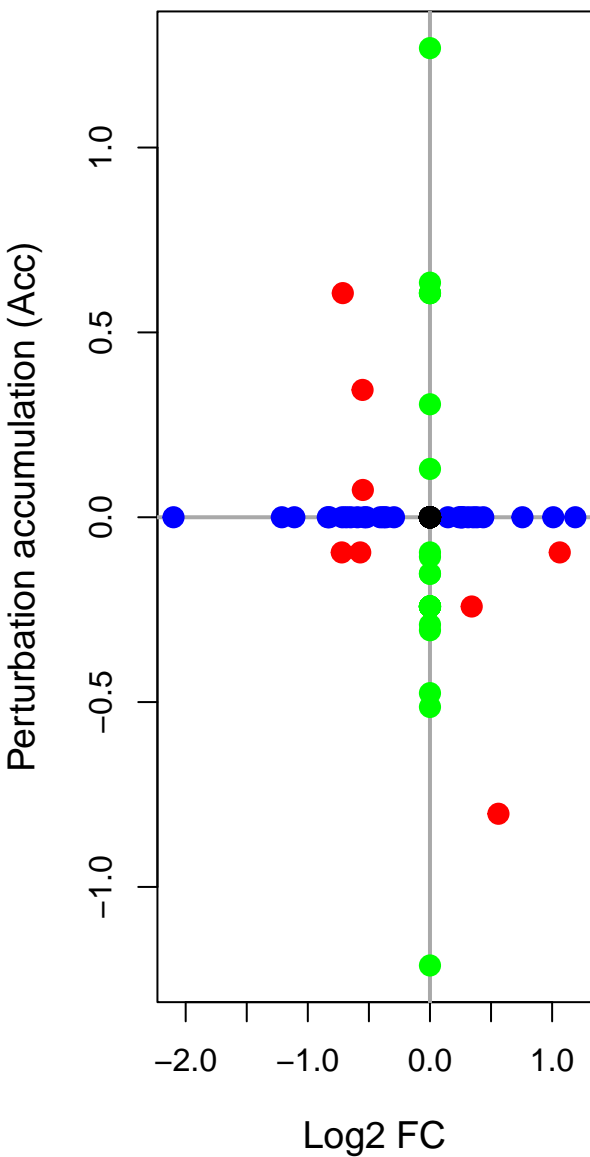
pathway ID=04080 P PERT=0.619



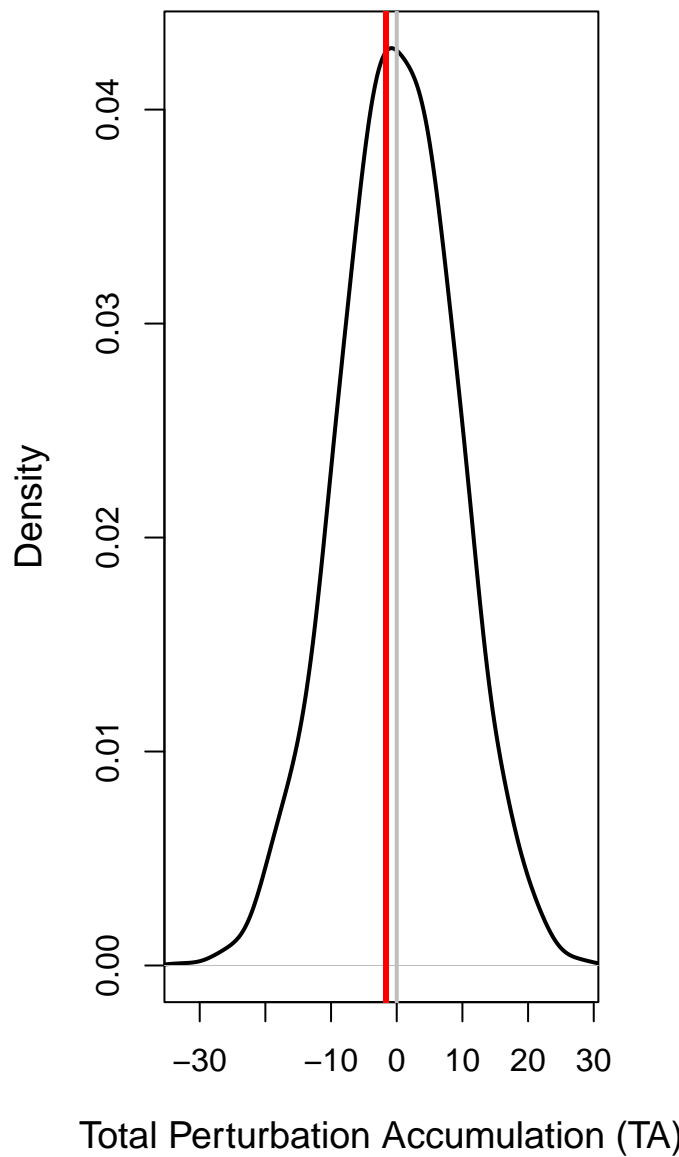
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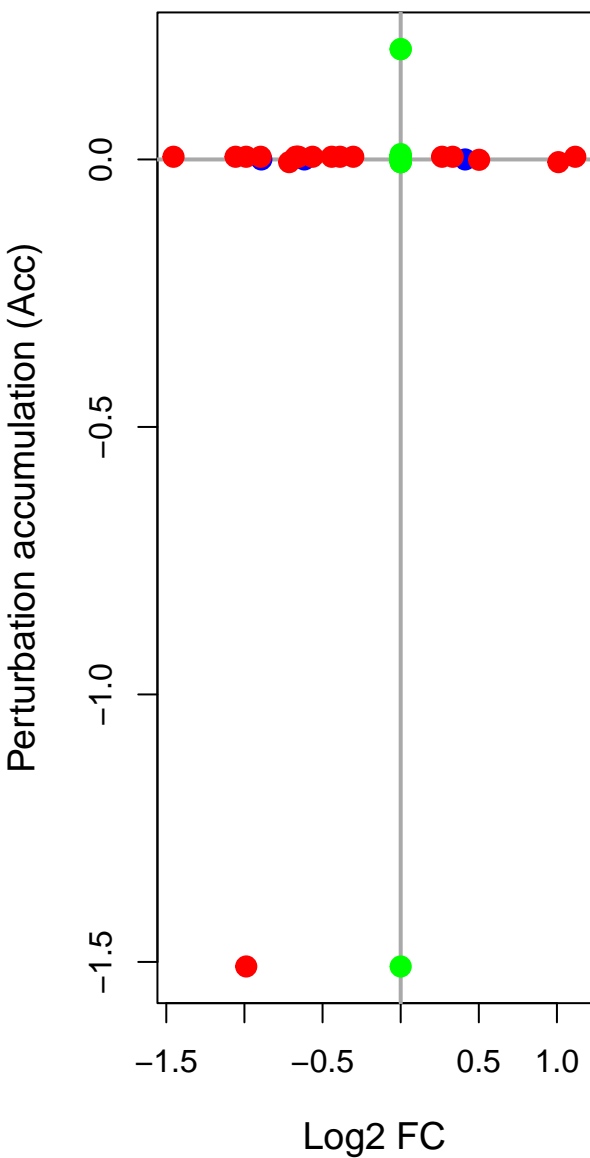
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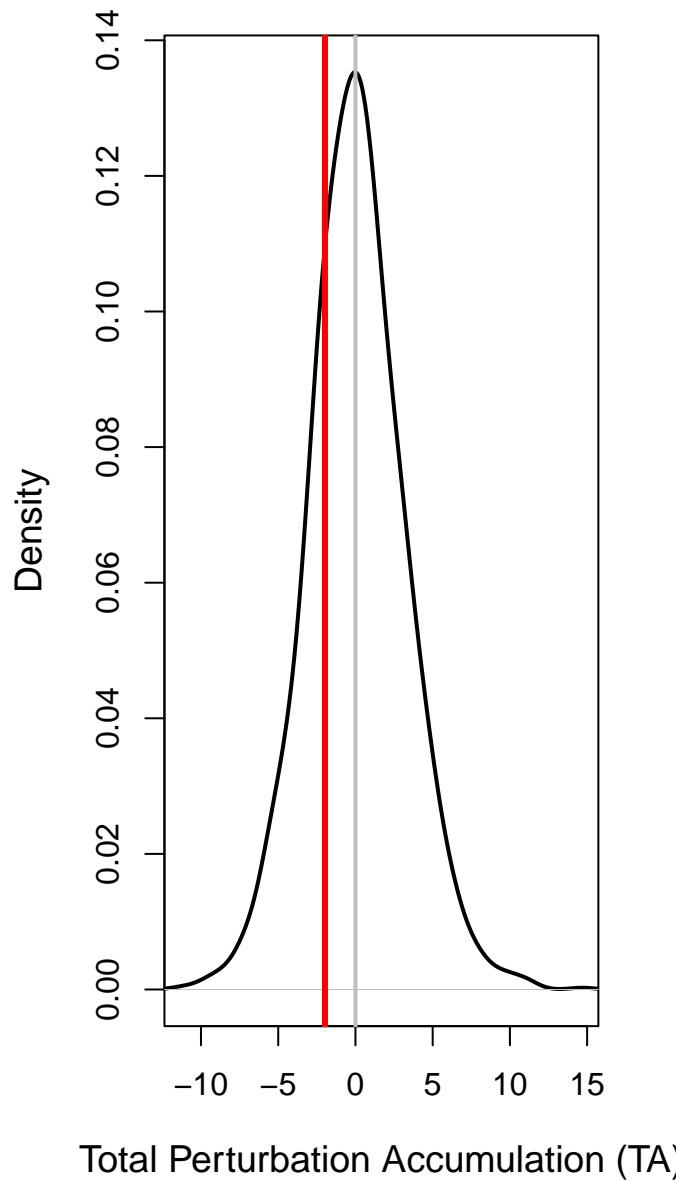
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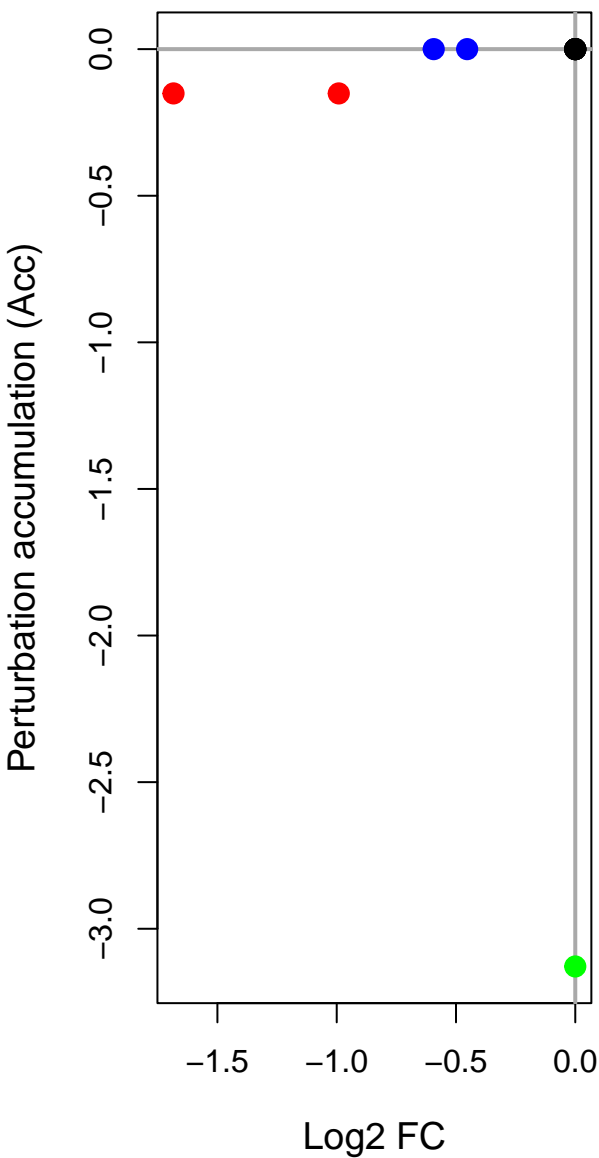
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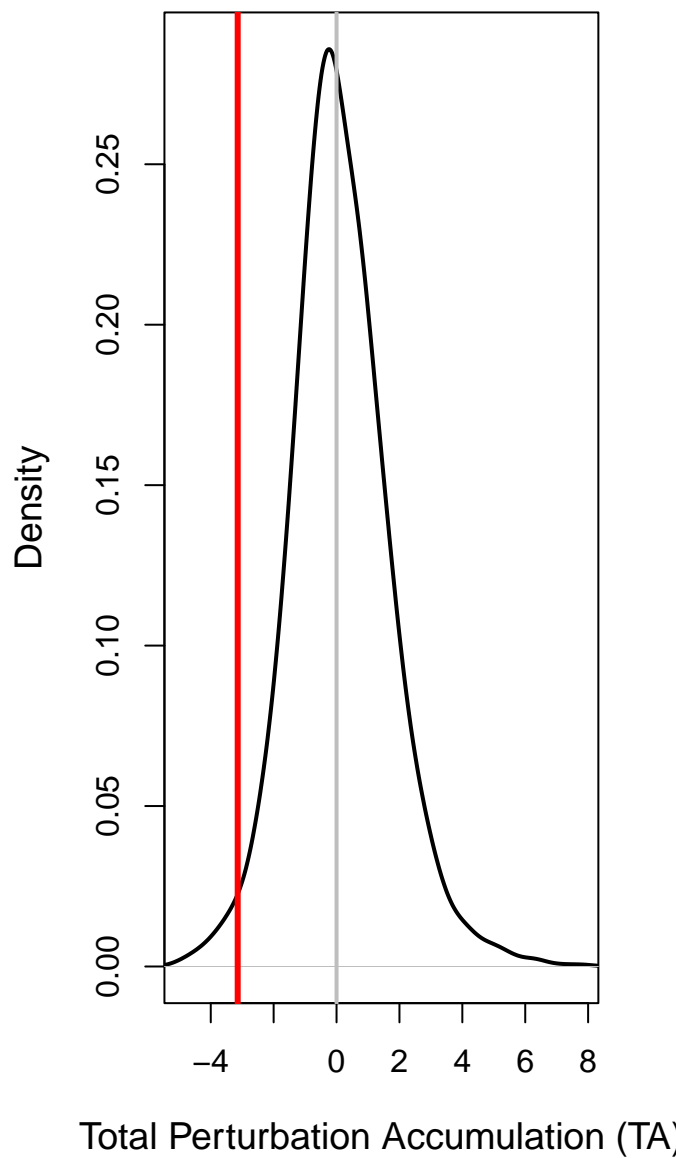
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pathway ID=04122

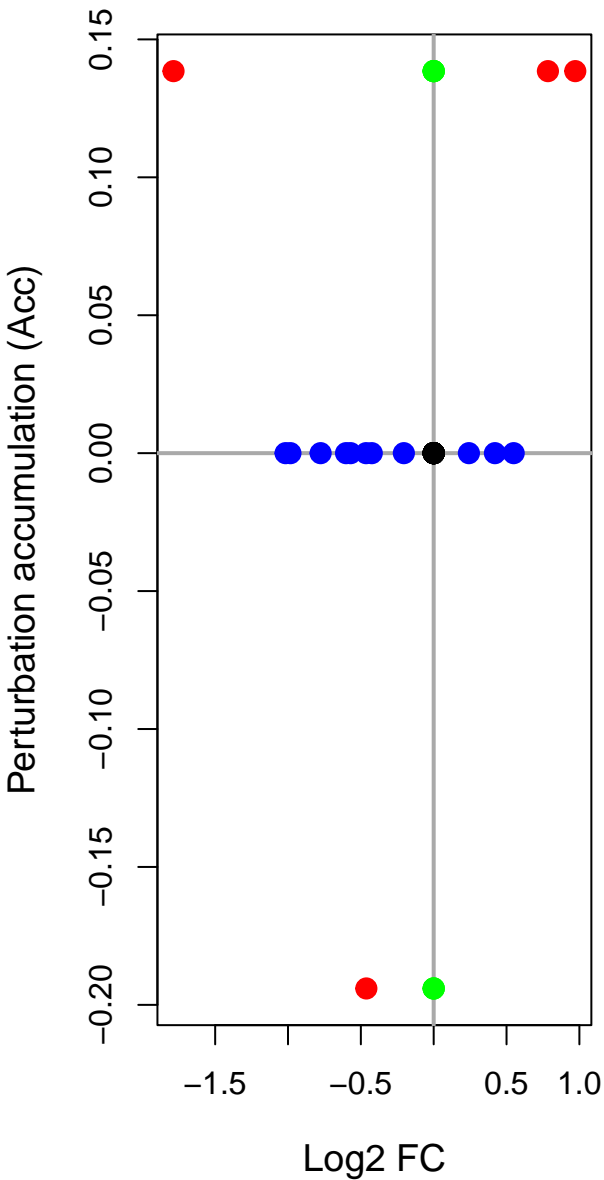


pathway ID=04122 P PERT=0.036

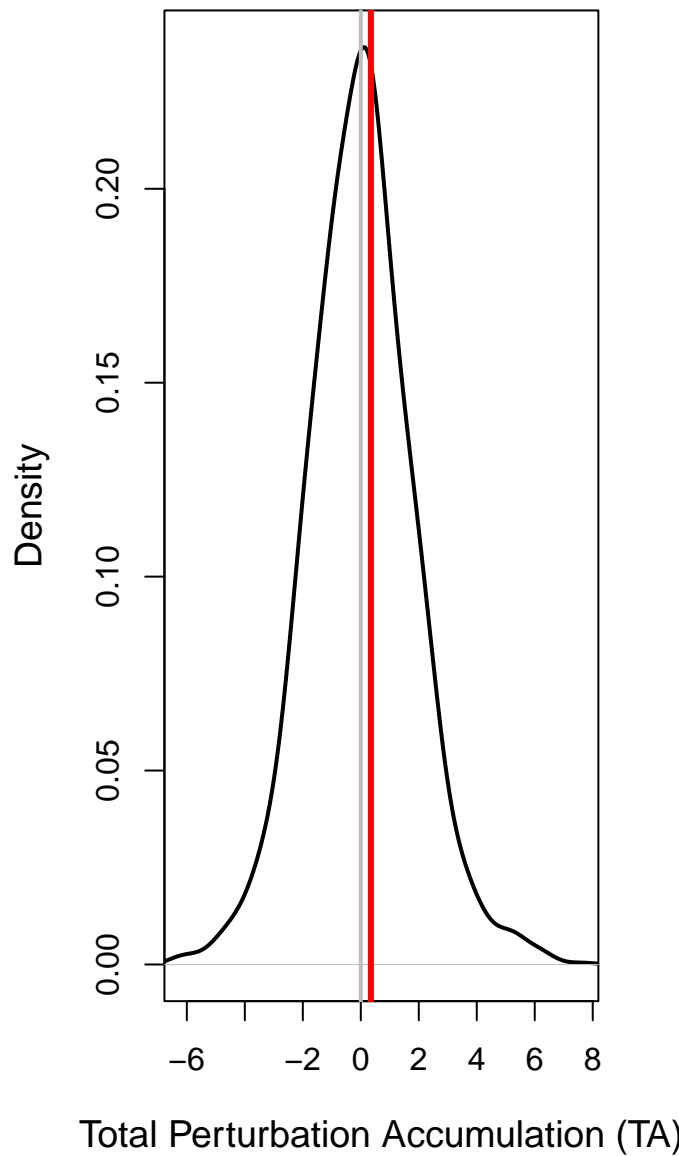




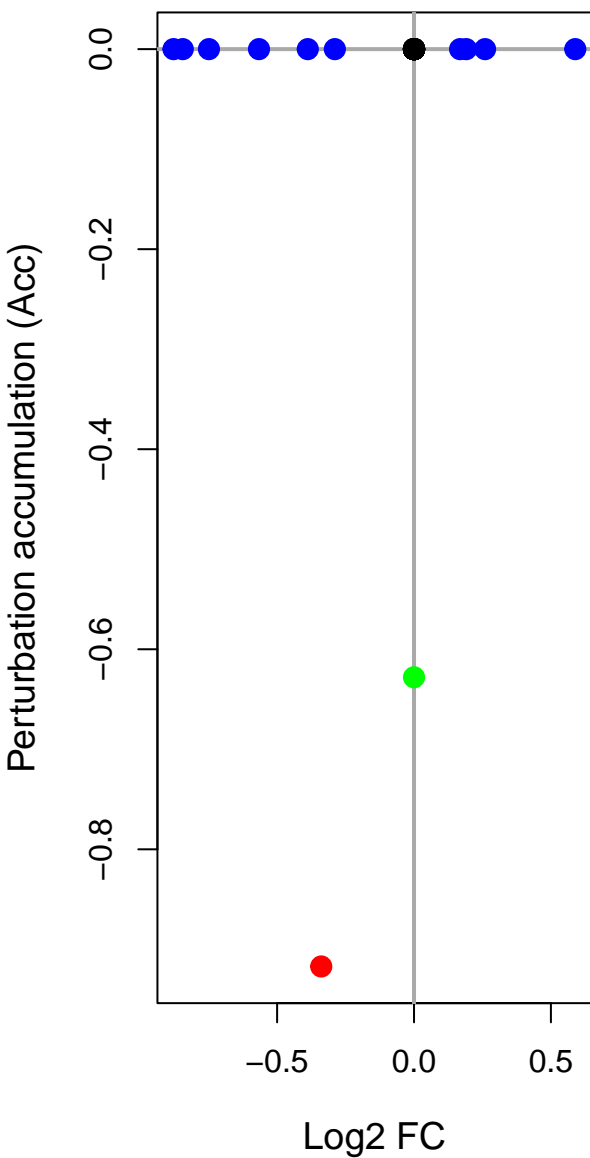
pathway ID=04130



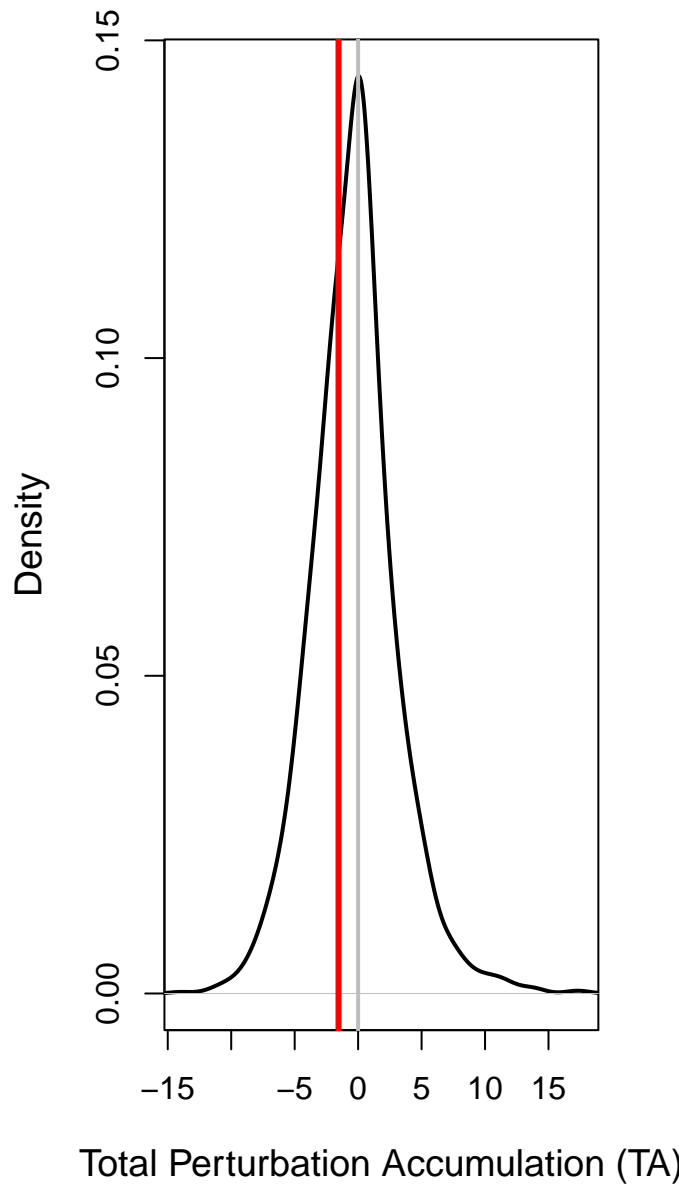
pathway ID=04130 P PERT=0.808



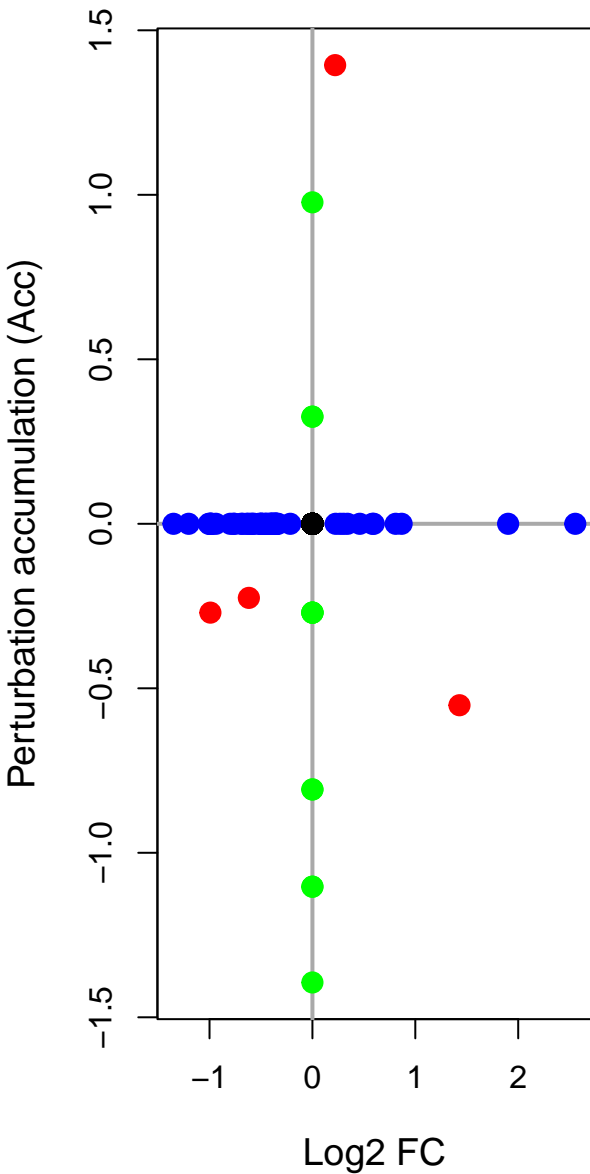
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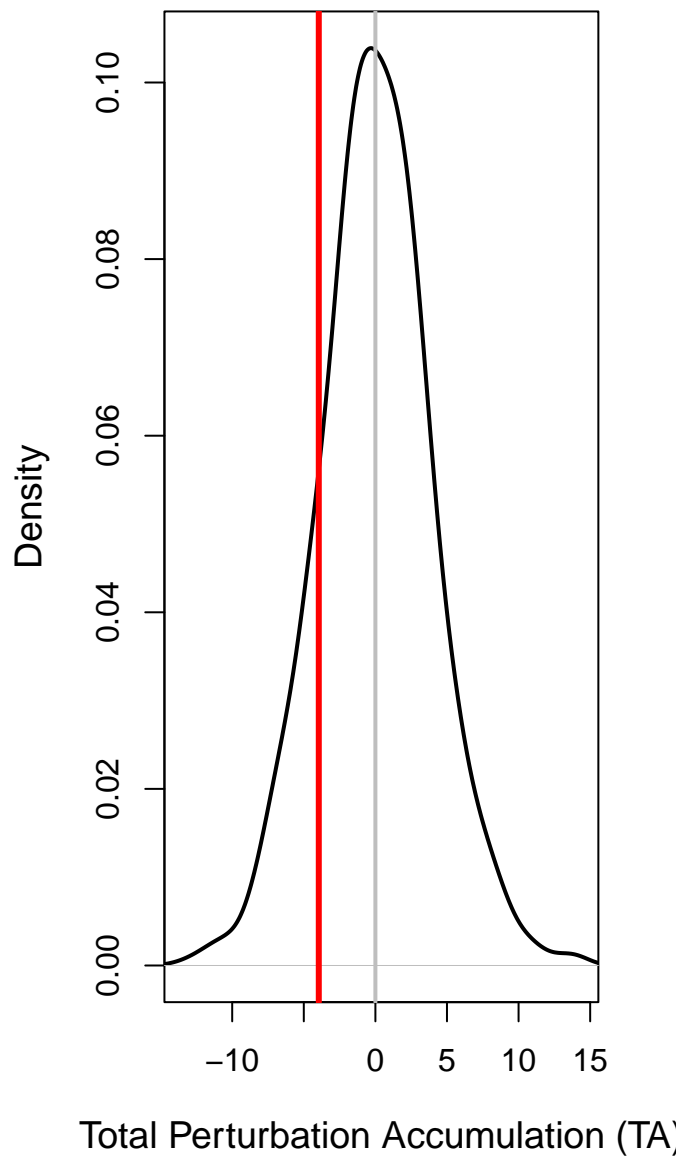
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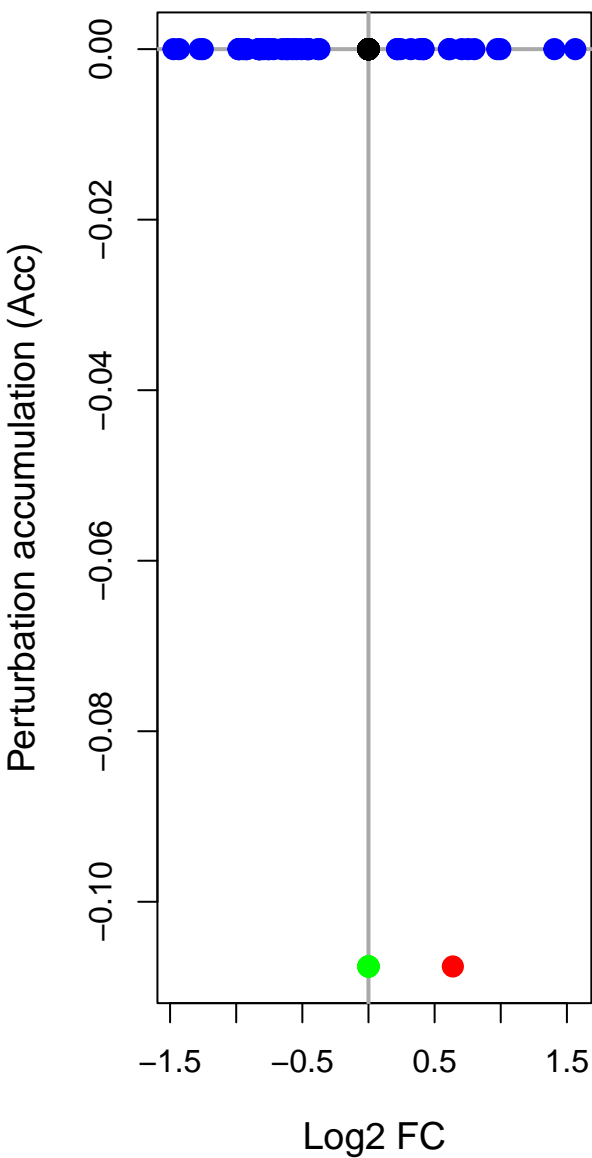
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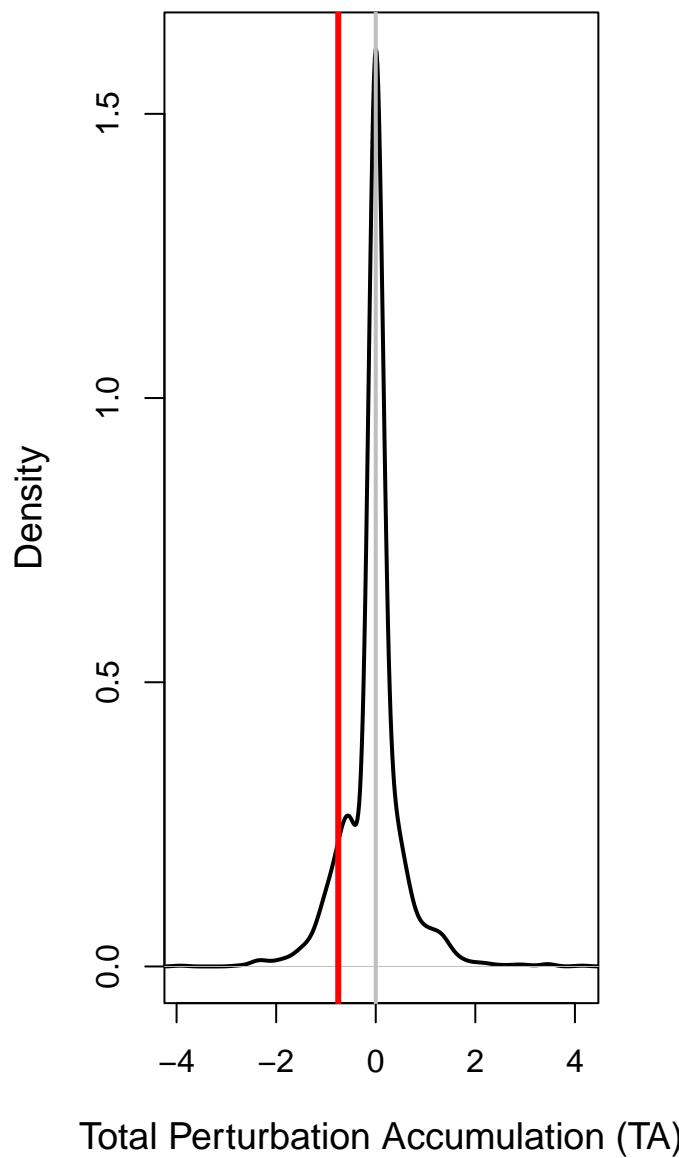
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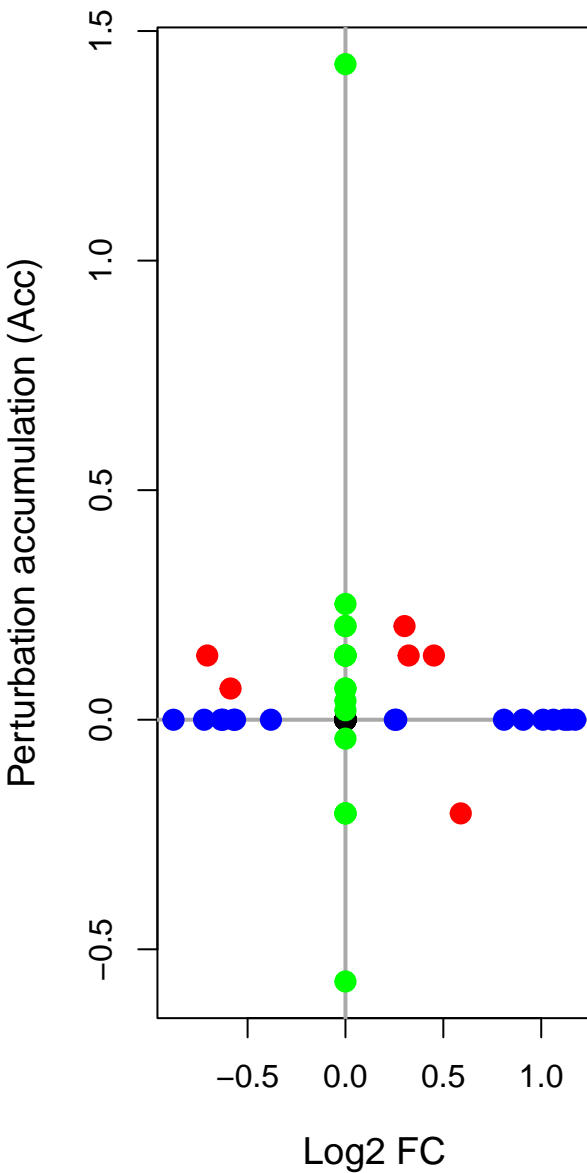
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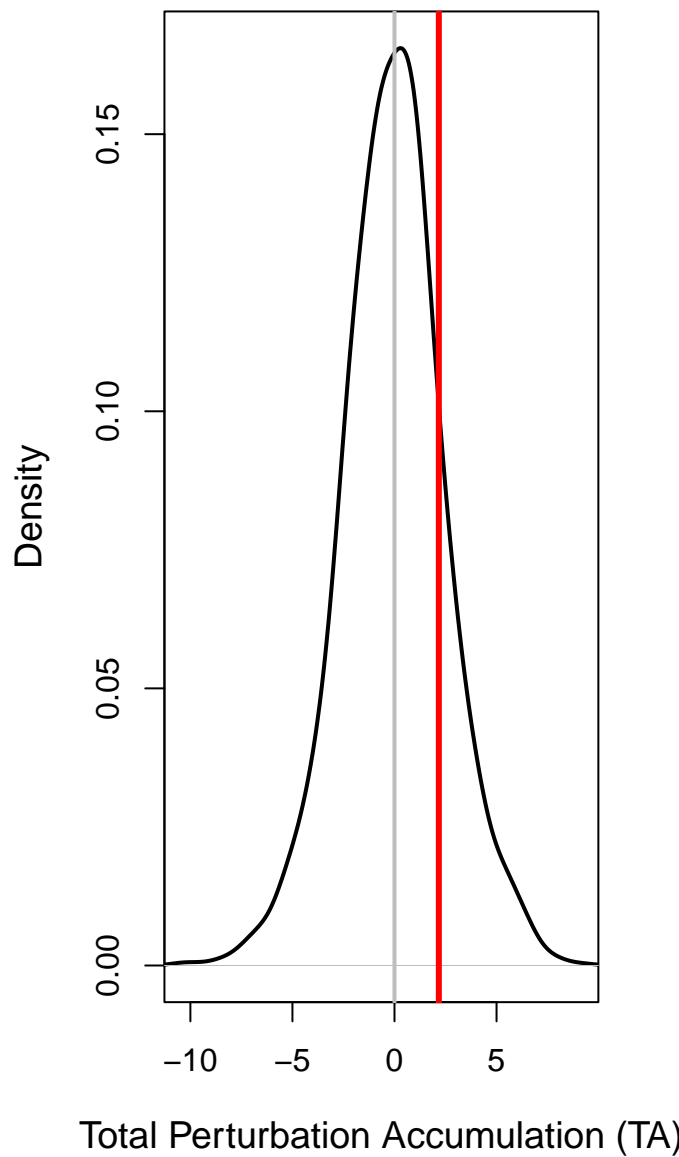
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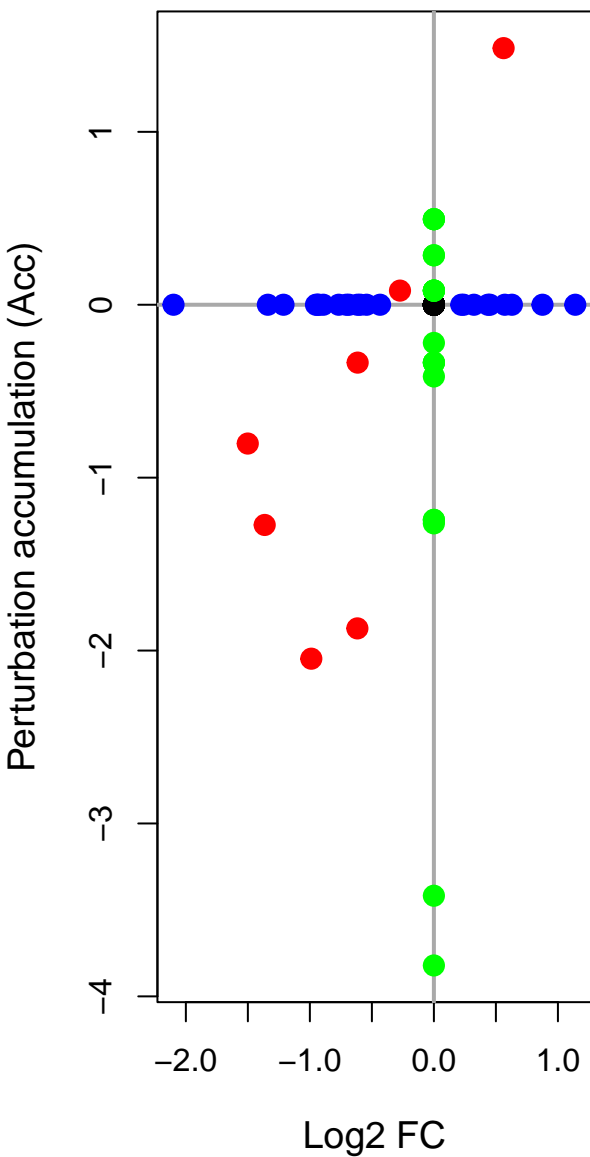
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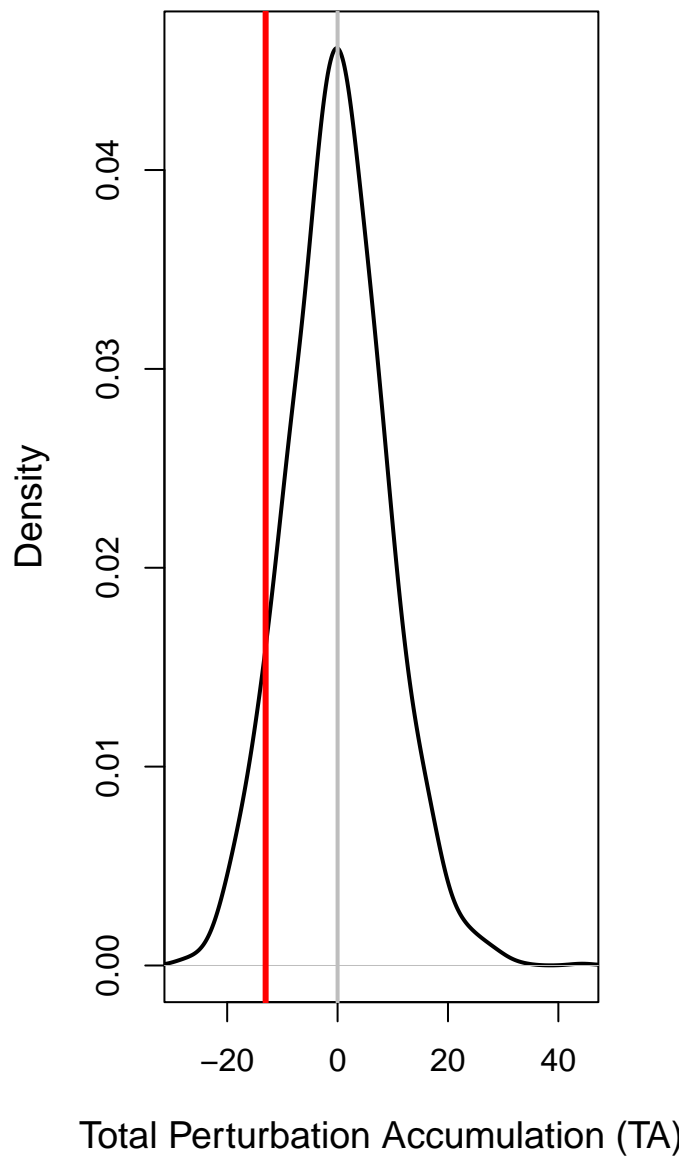
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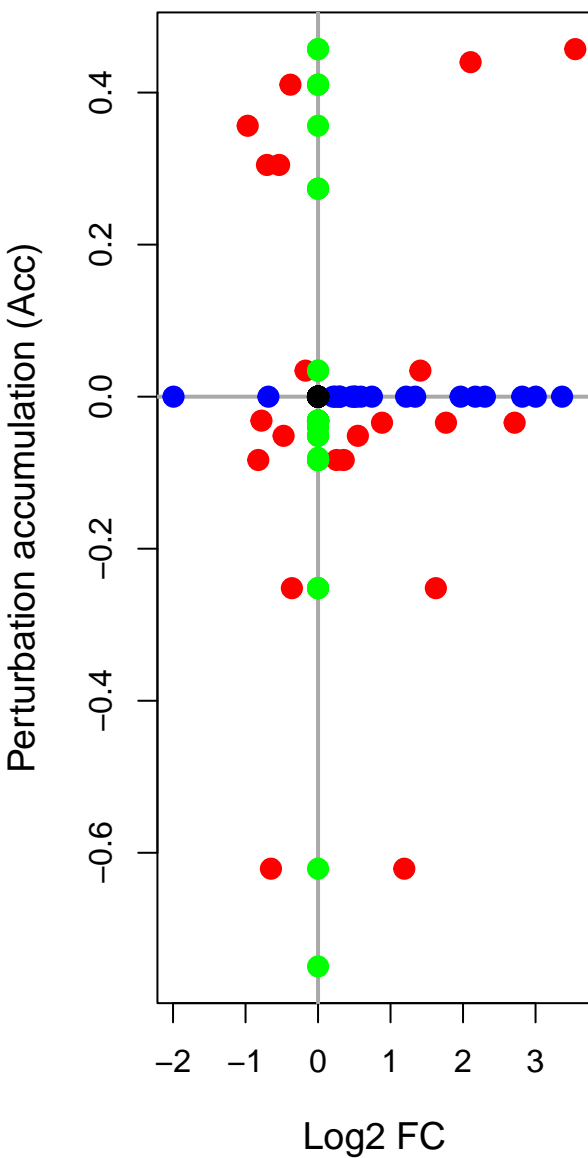
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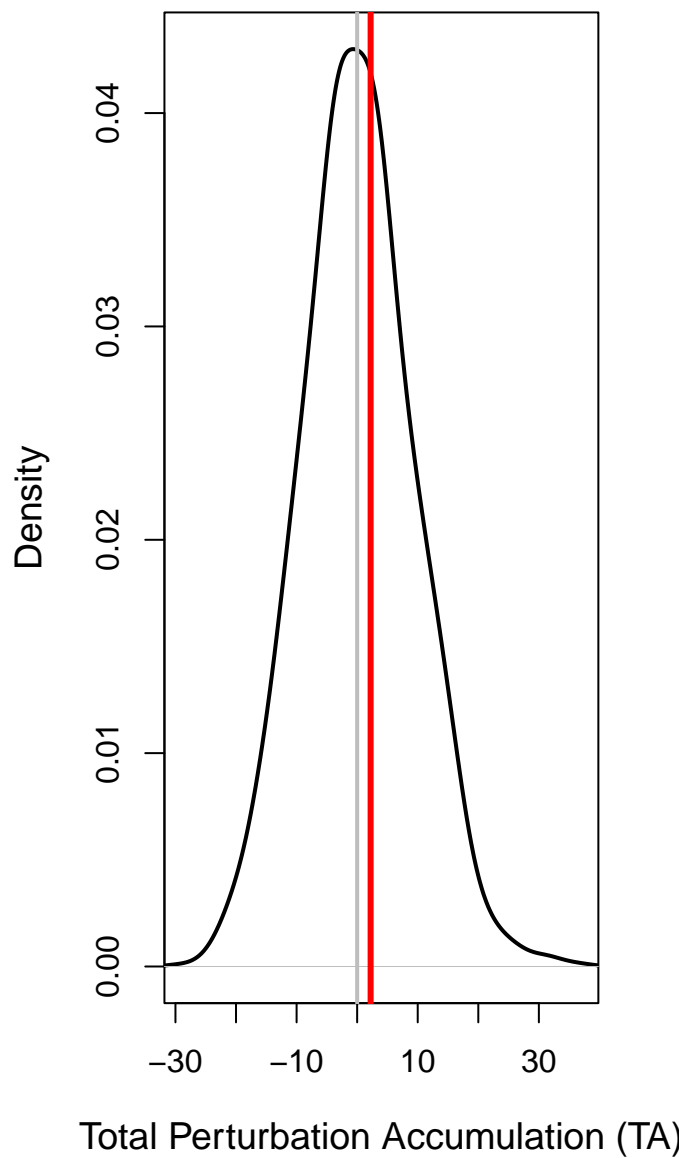
pathway ID=04210 P PERT=0.147



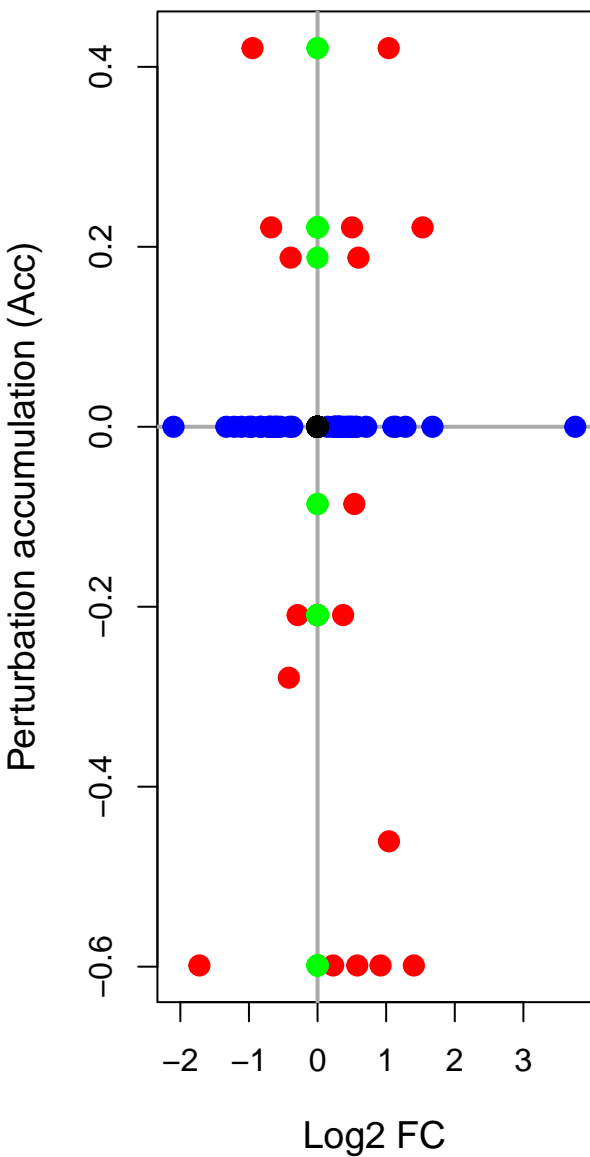
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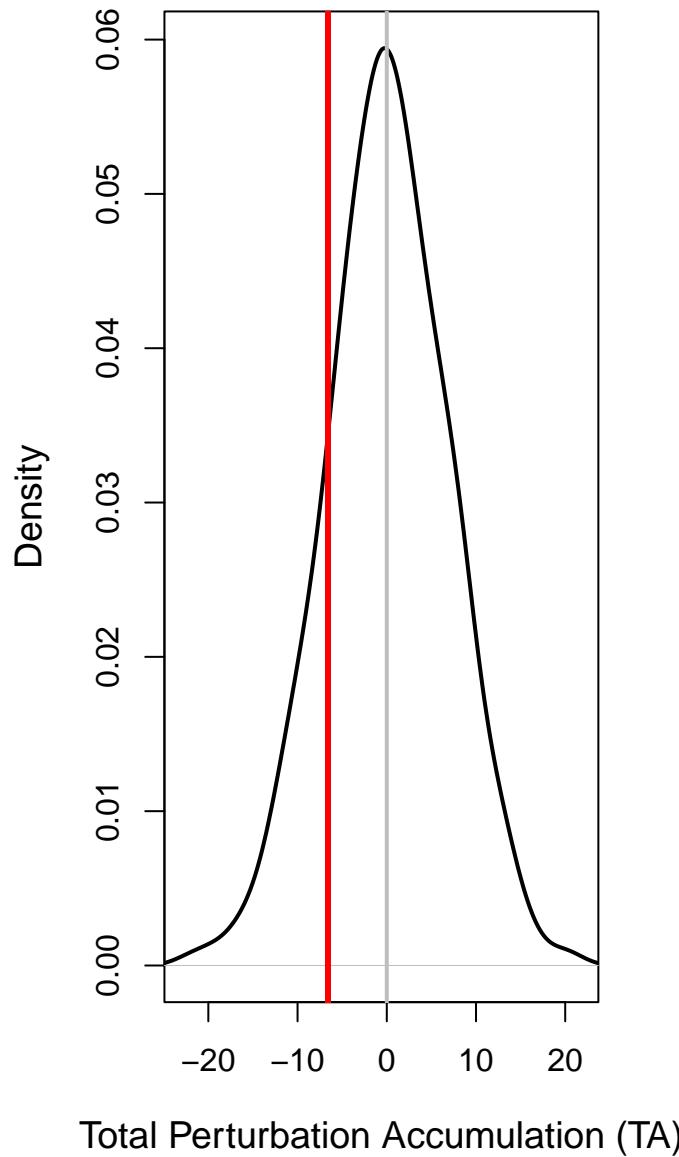
pathway ID=04270 P PERT=0.811



pathway ID=04310

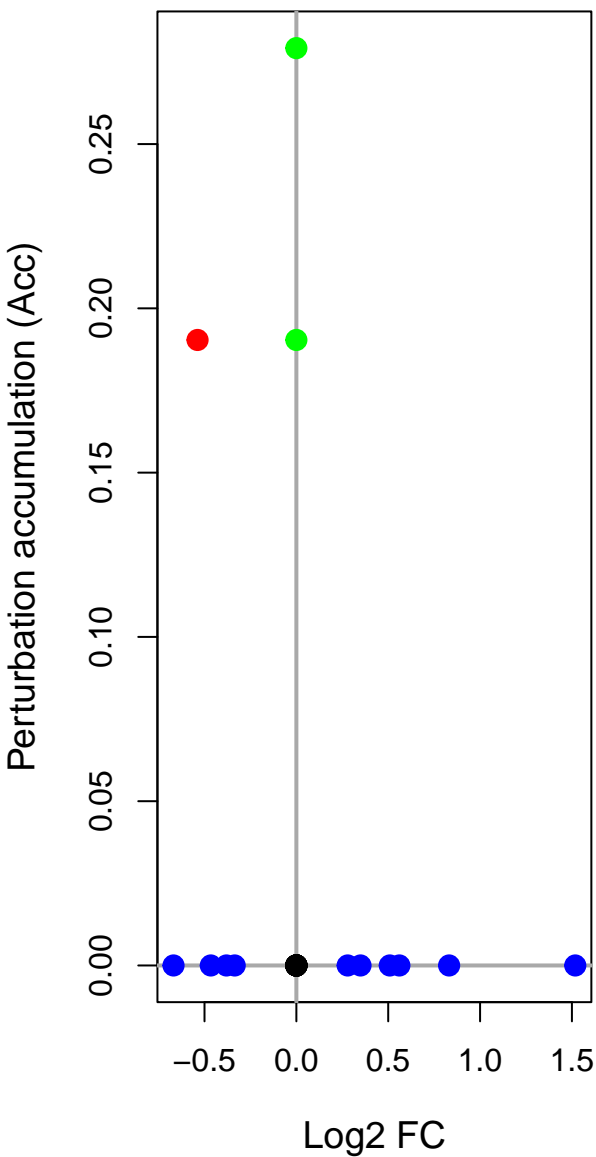


pathway ID=04310 P PERT=0.318

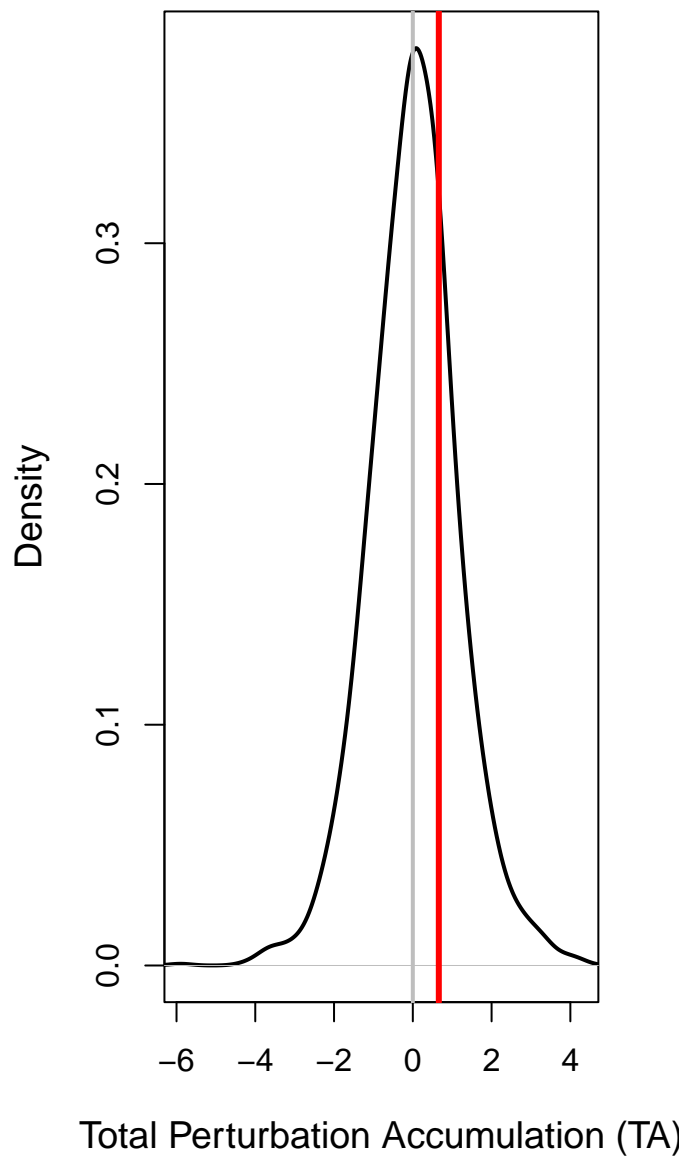




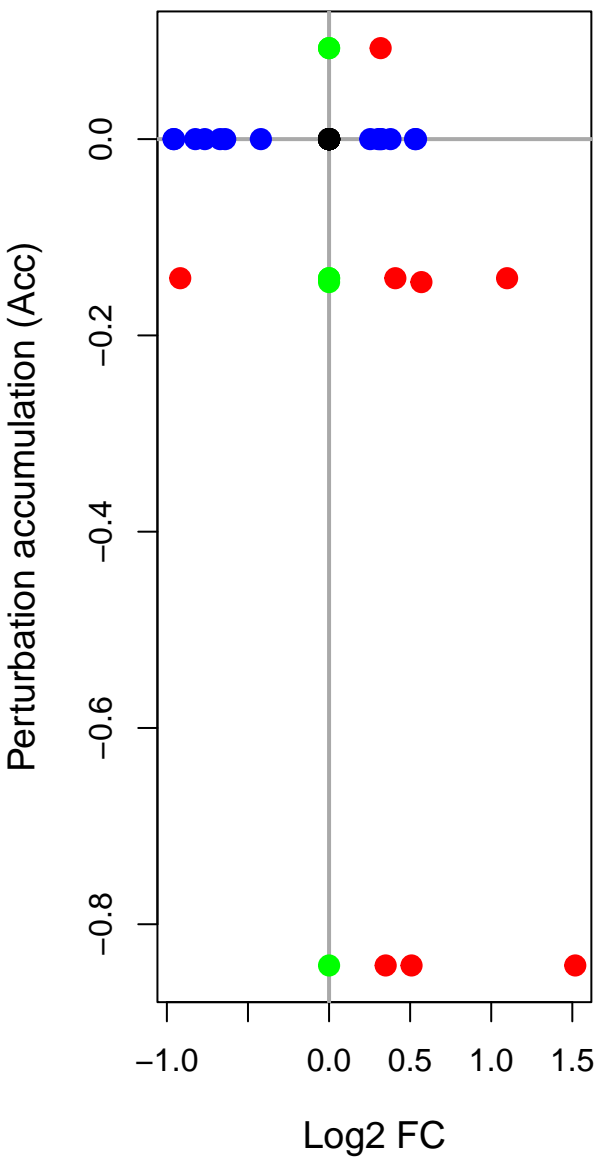
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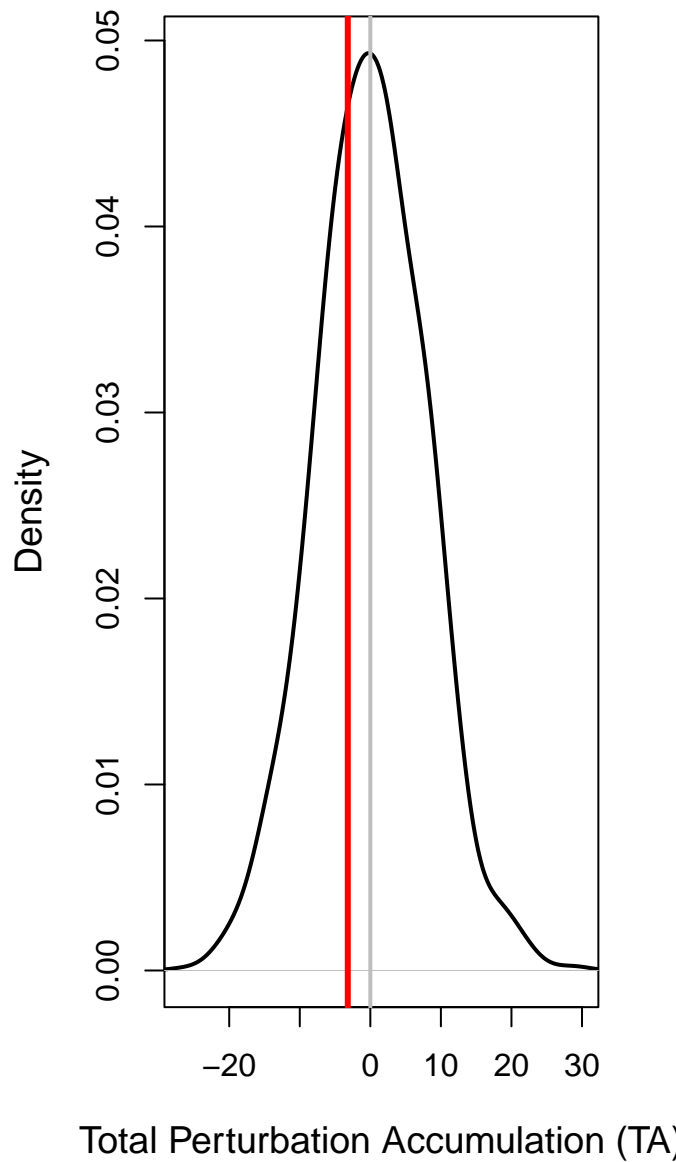
pathway ID=04320 P PERT=0.528



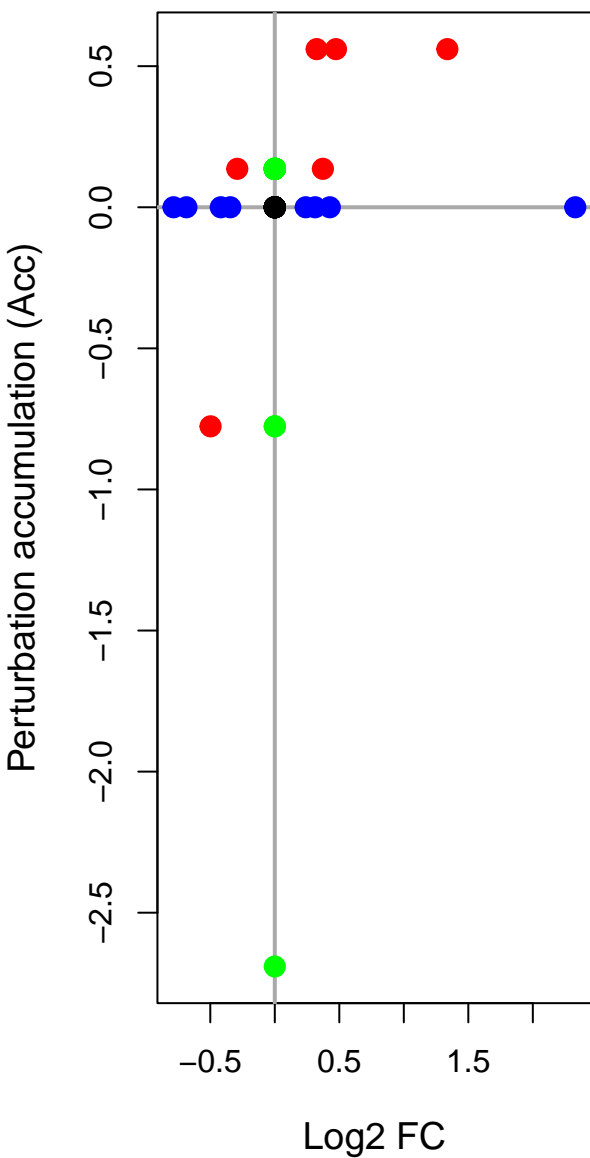
pathway ID=04330



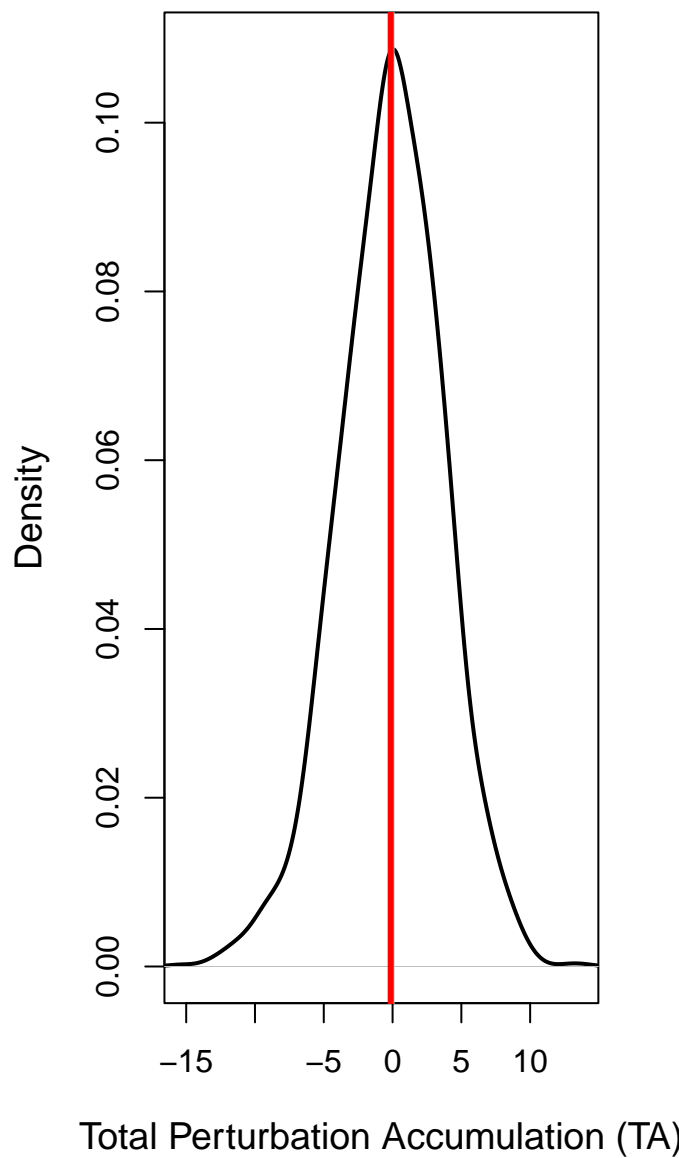
pathway ID=04330 P PERT=0.687



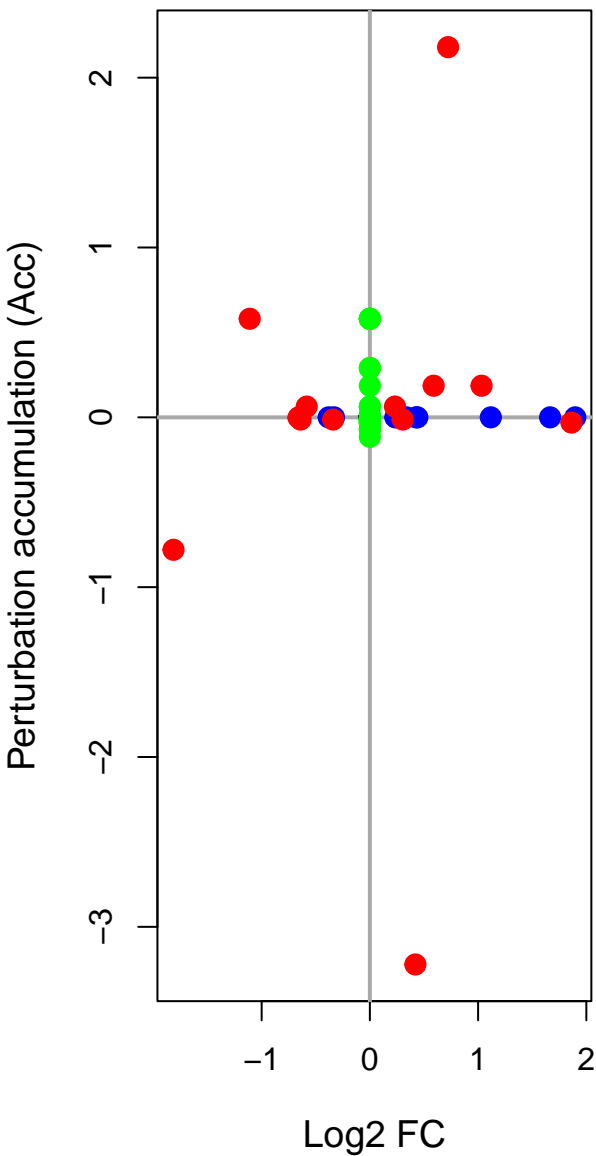
pathway ID=04340



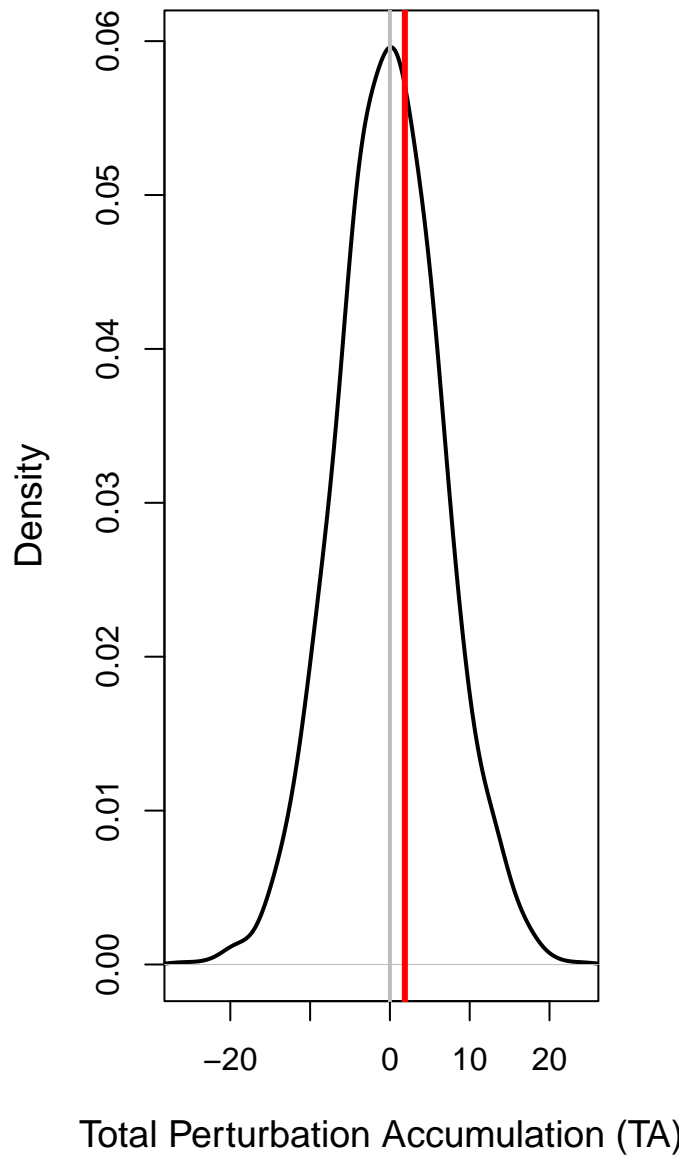
pathway ID=04340 P PERT=0.961



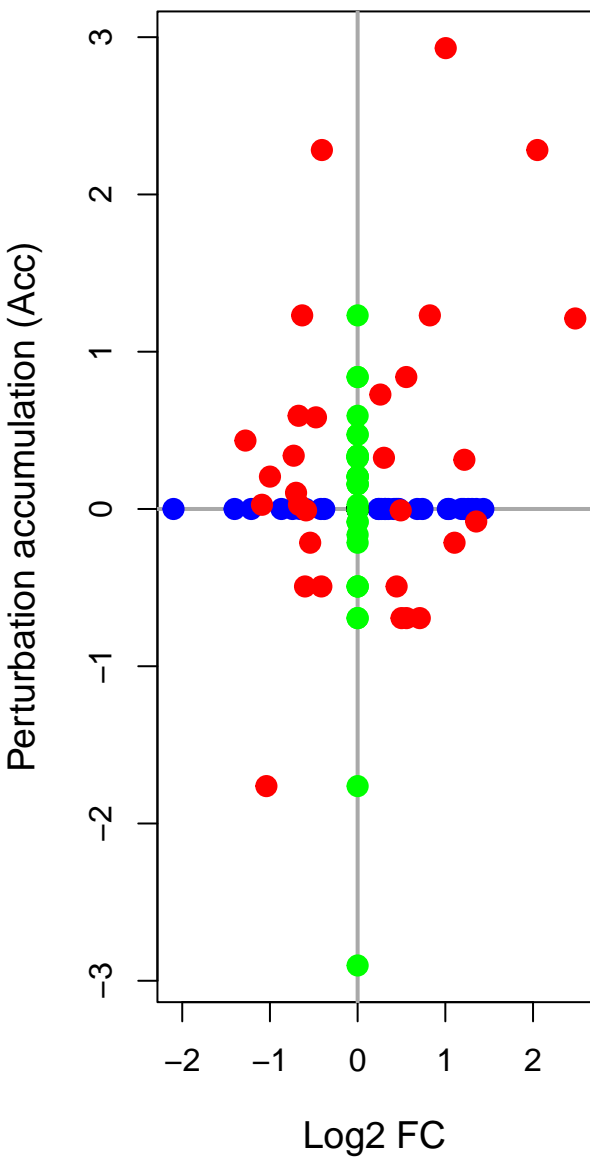
pathway ID=04350



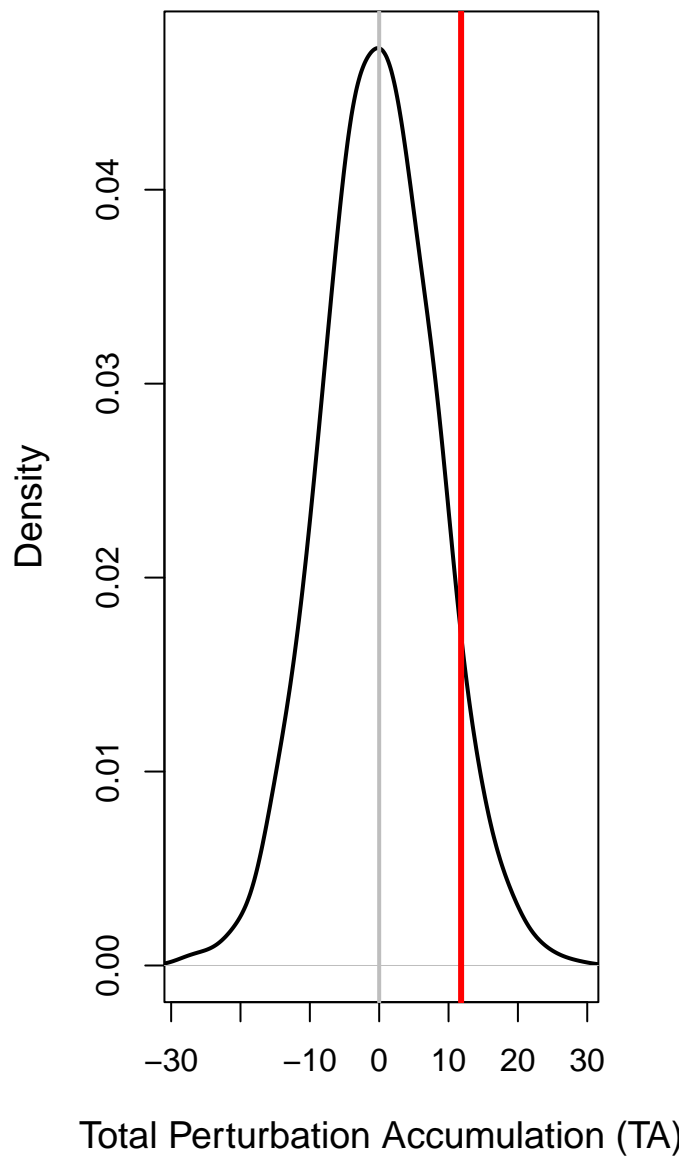
pathway ID=04350 P PERT=0.764



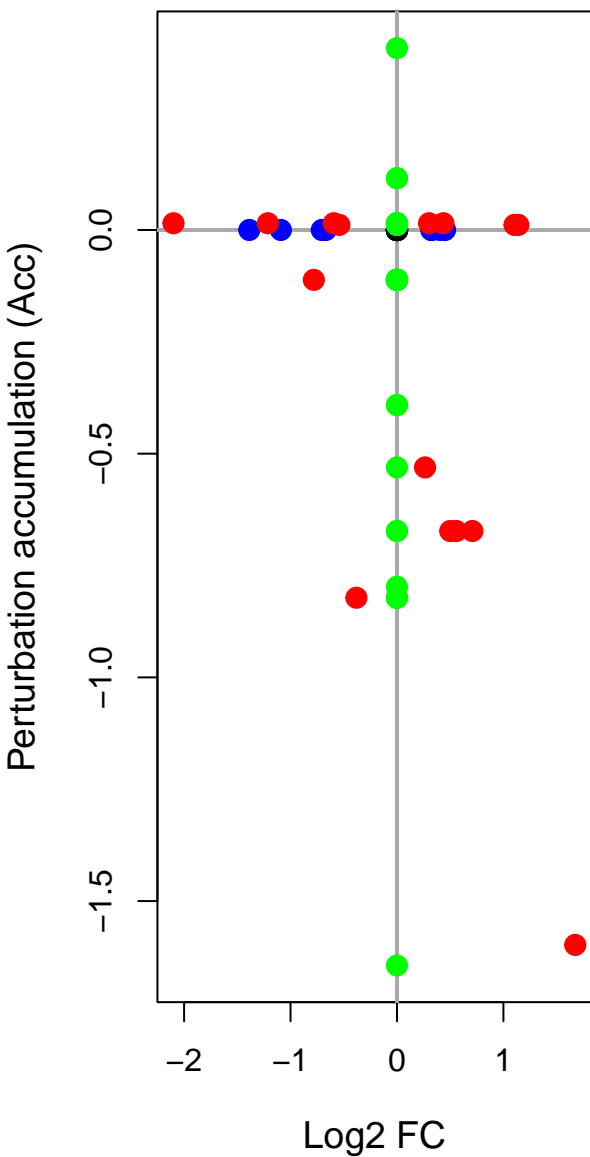
pathway ID=04360



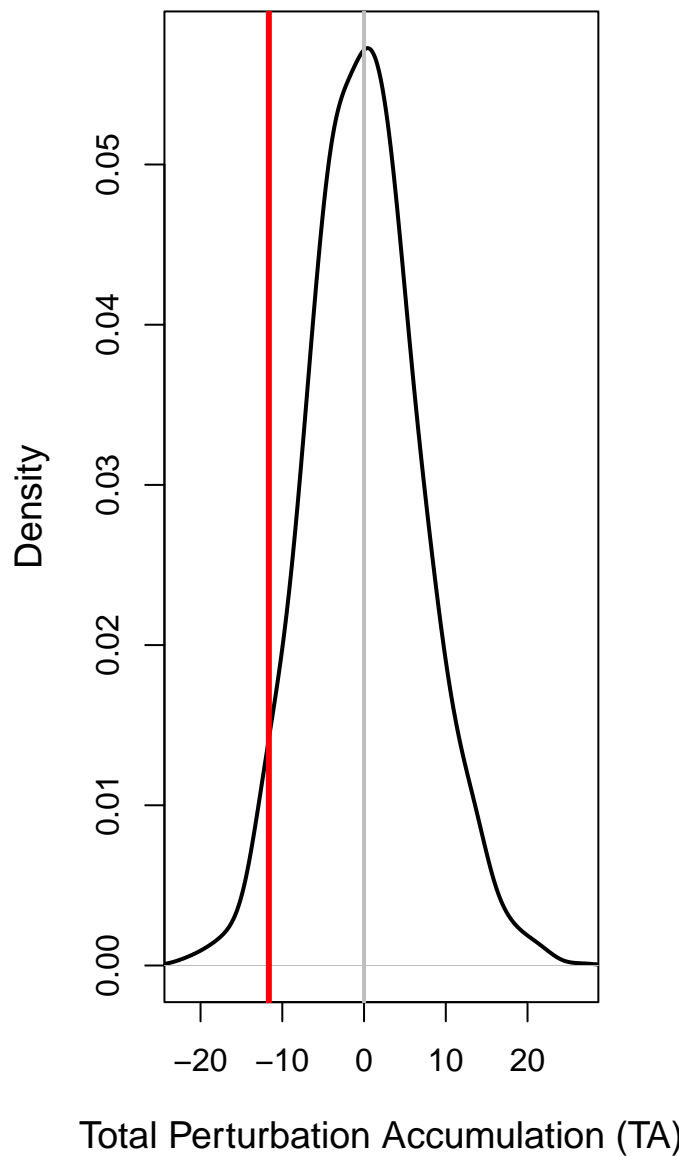
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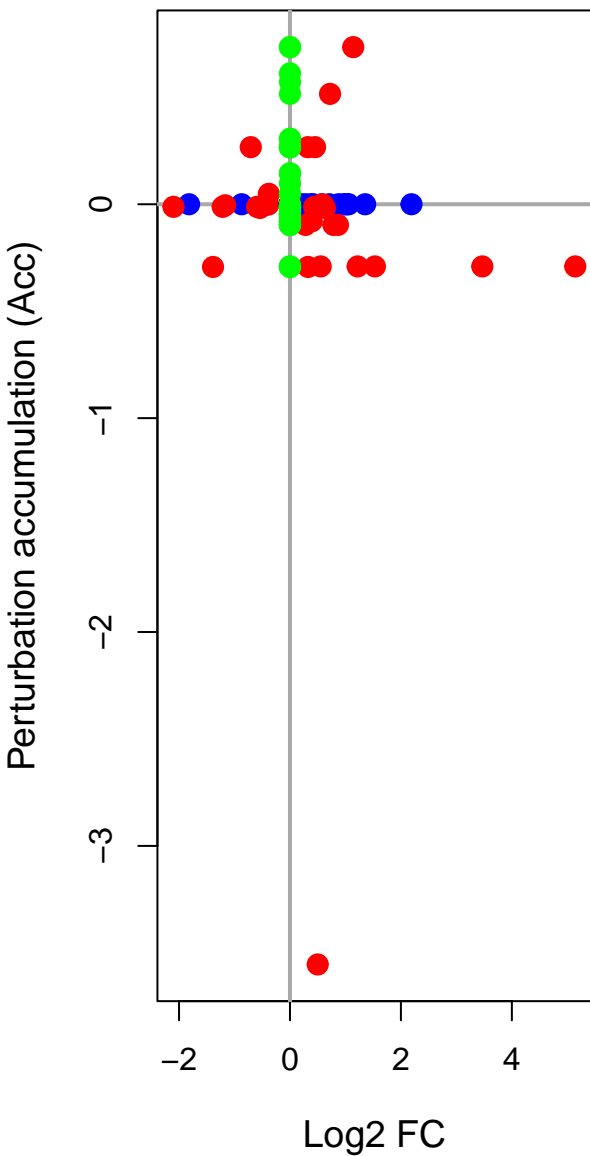
pathway ID=04370



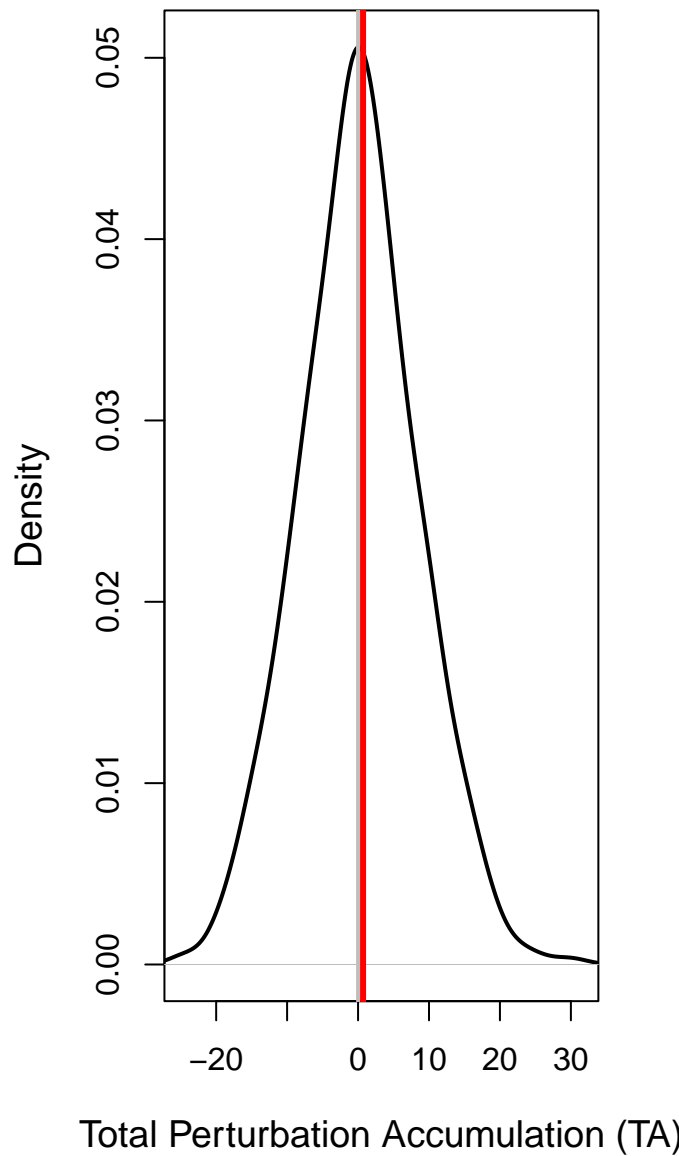
pathway ID=04370 P PERT=0.079



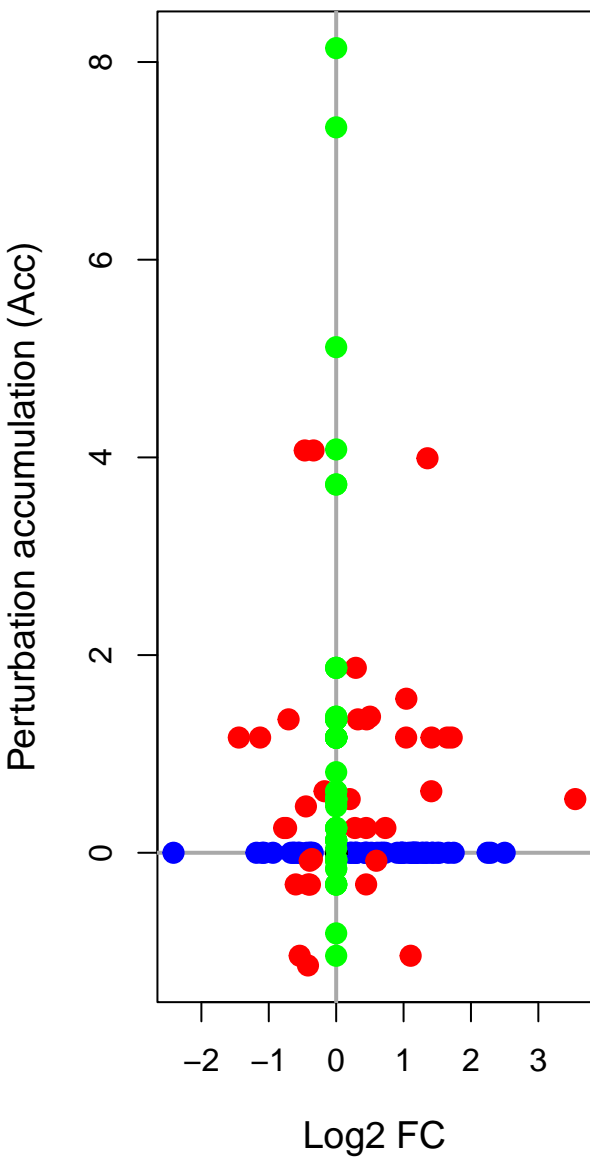
pathway ID=04380



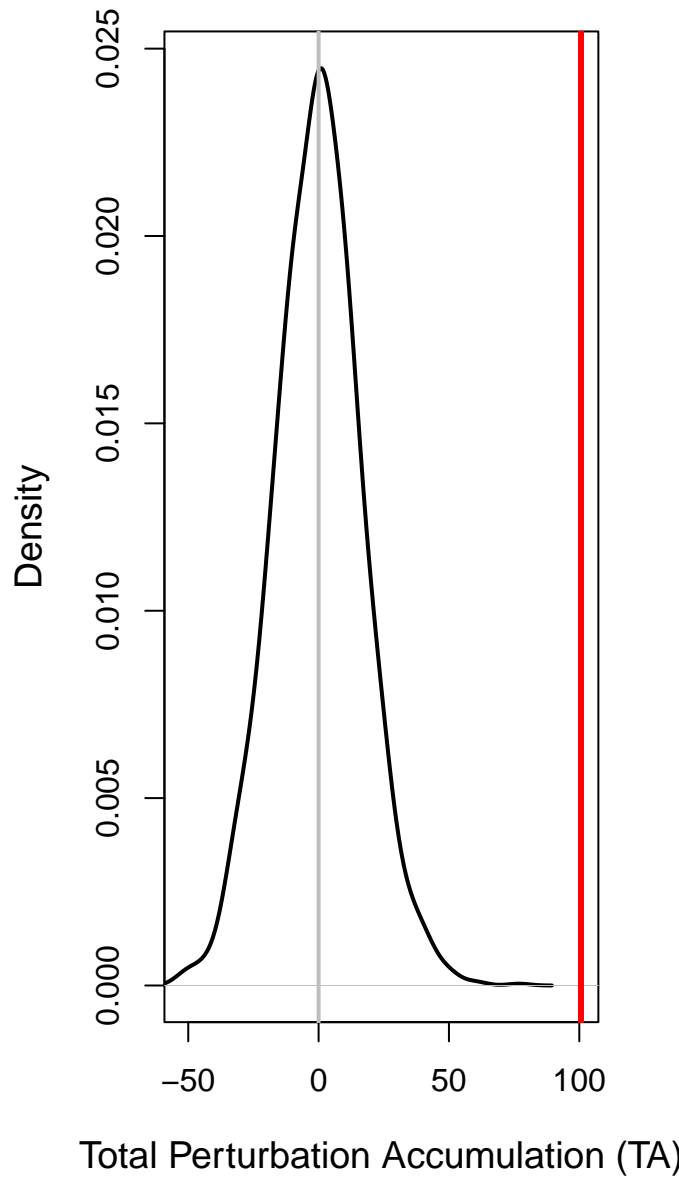
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pathway ID=04510

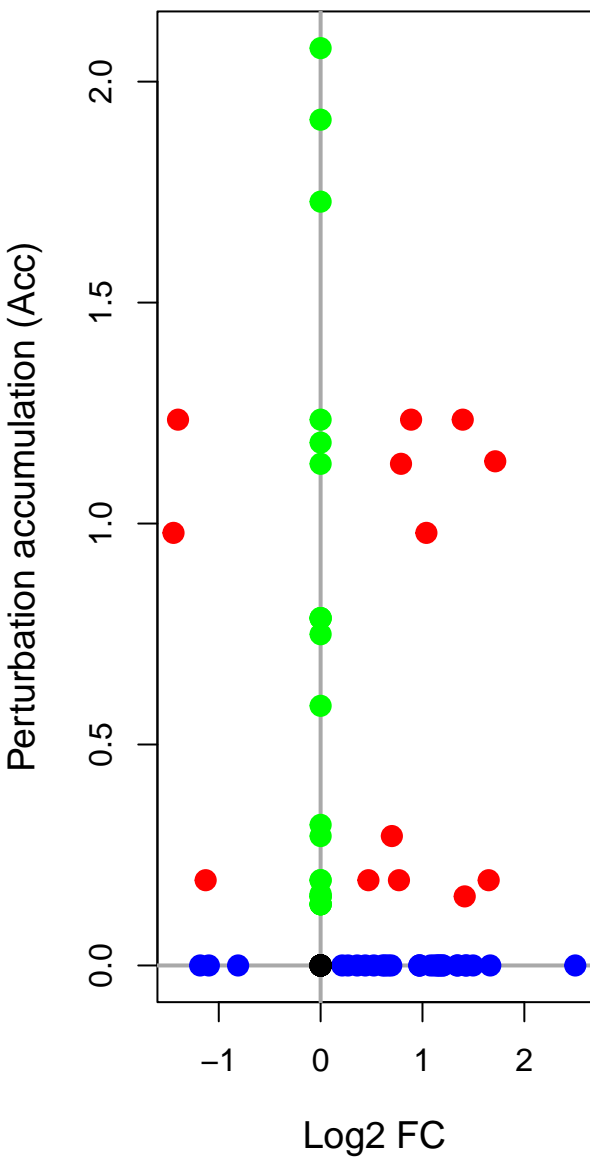


pathway ID=04510 P PERT=0

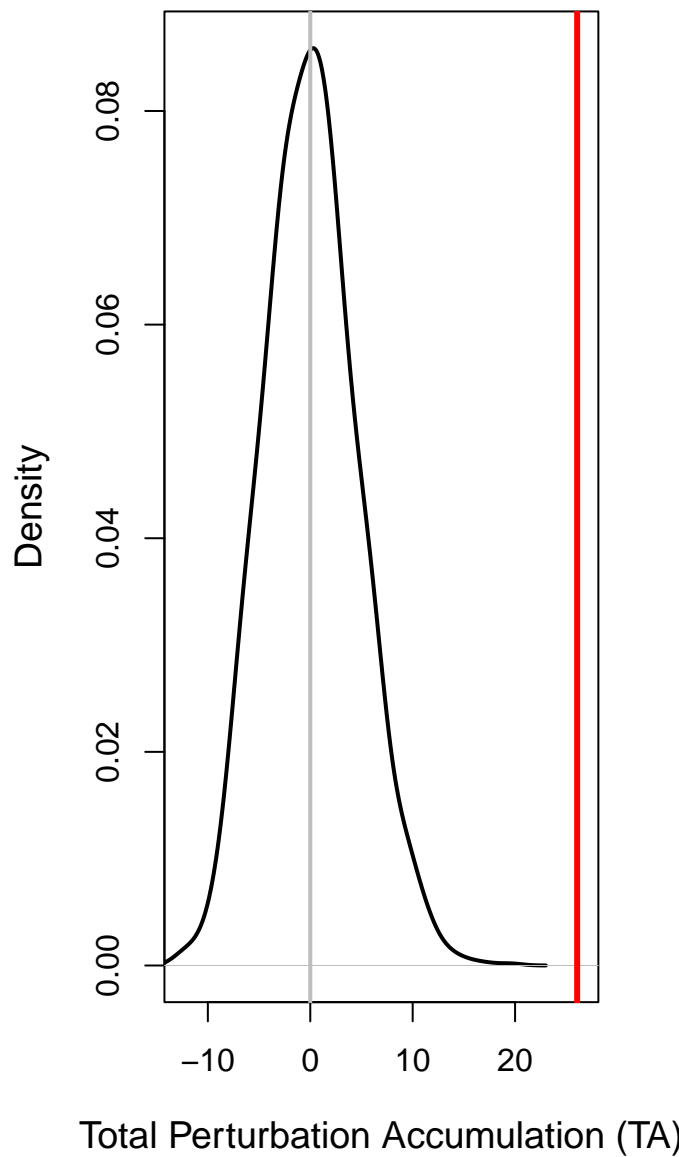




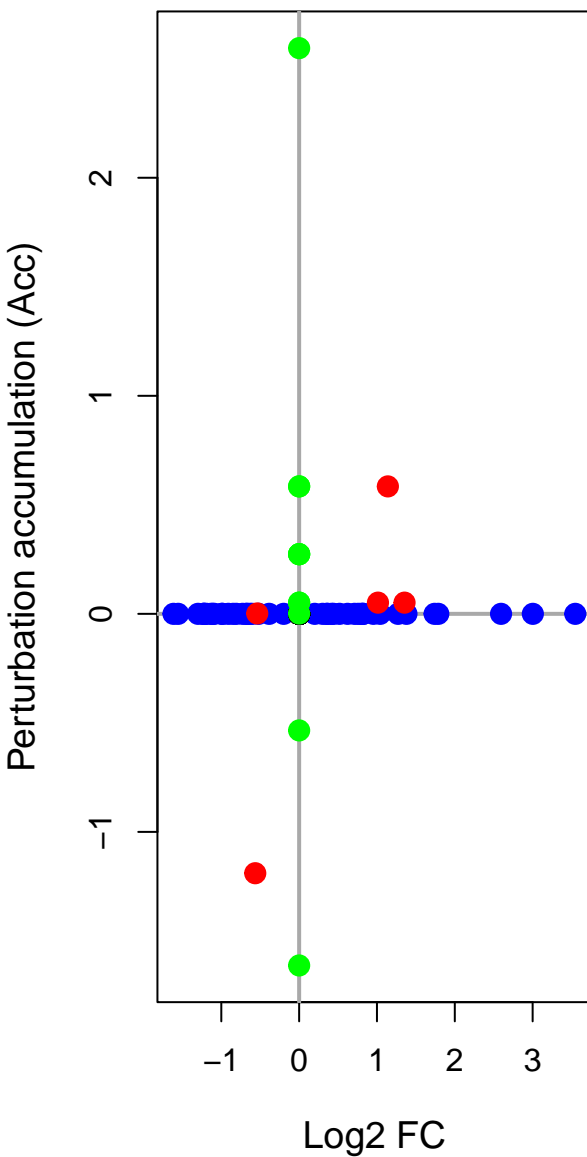
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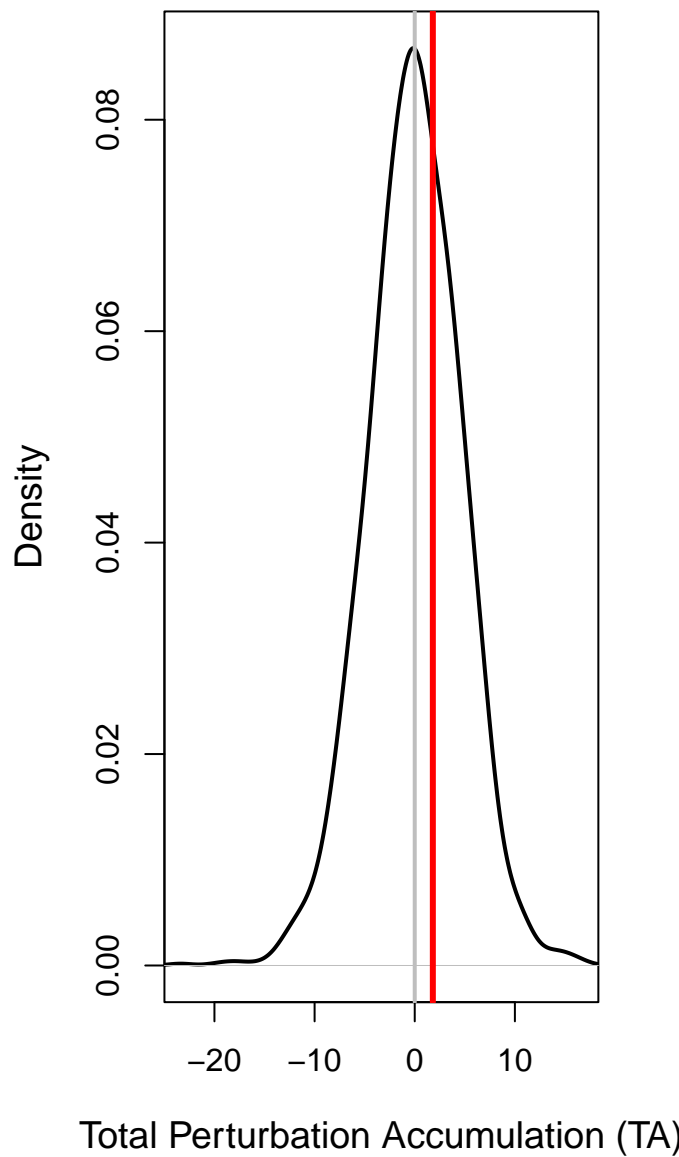
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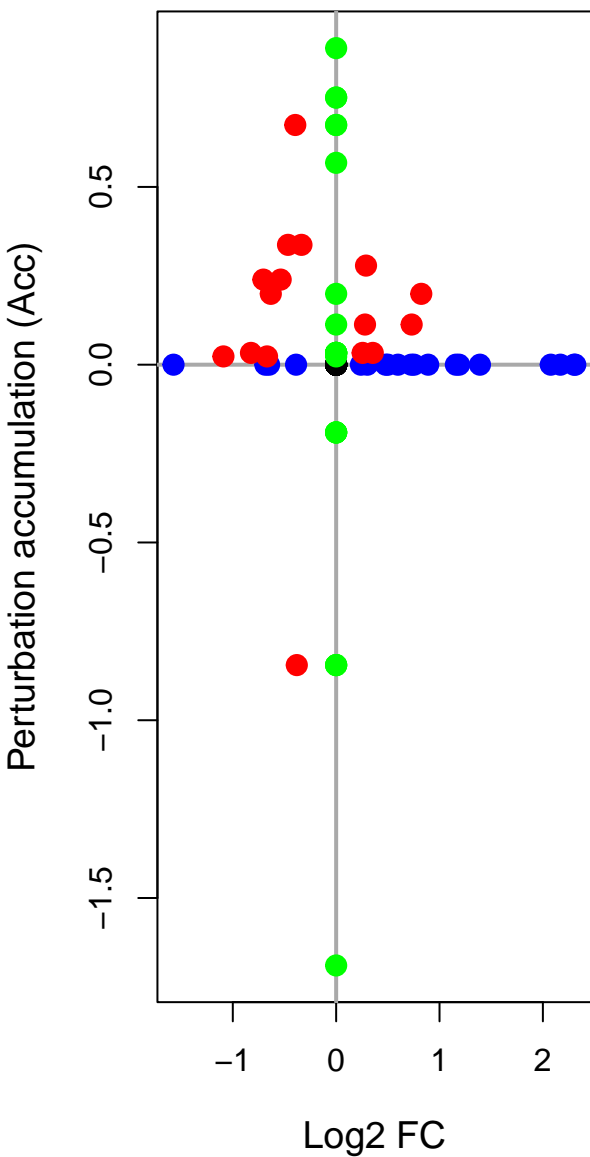
pathway ID=04530



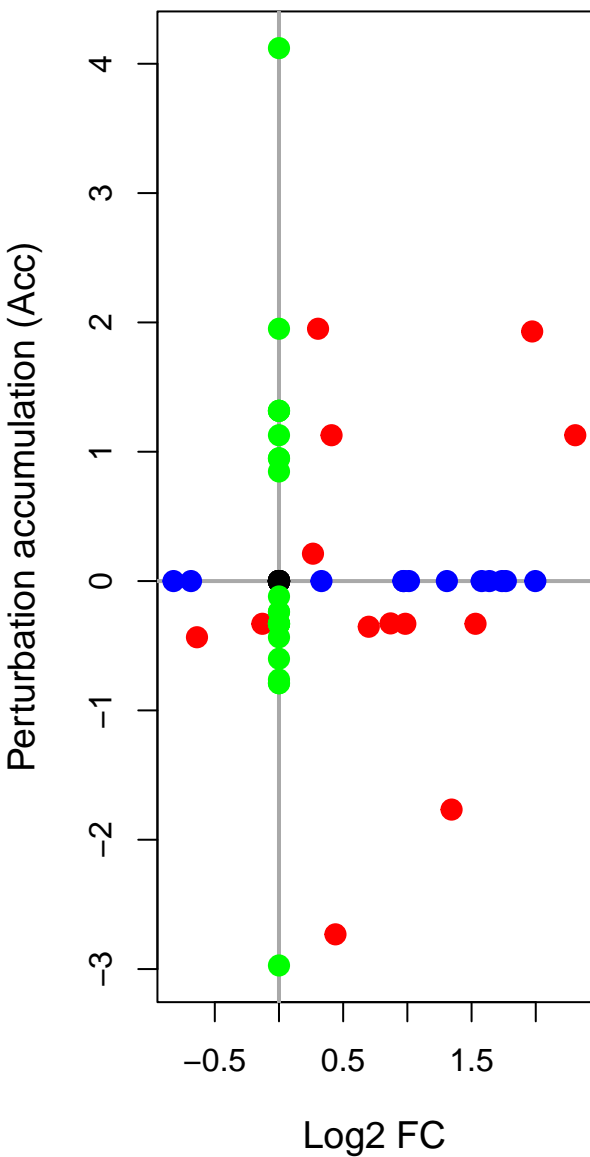
pathway ID=04530 P PERT=0.692



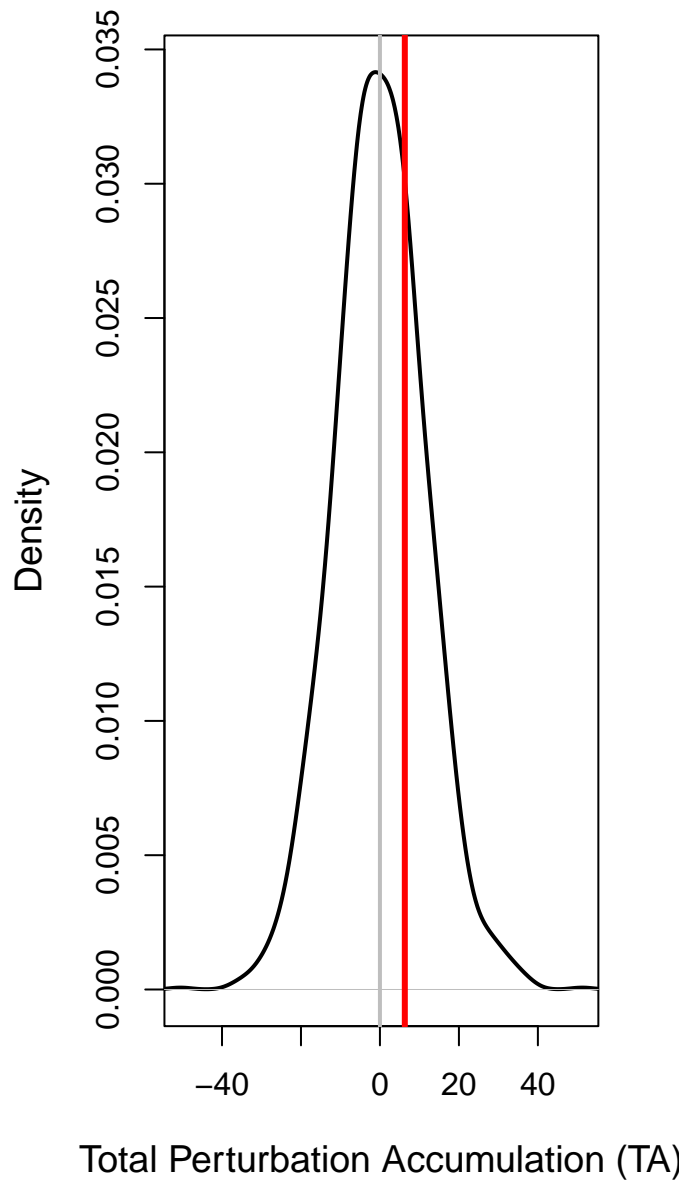
pathway ID=04540



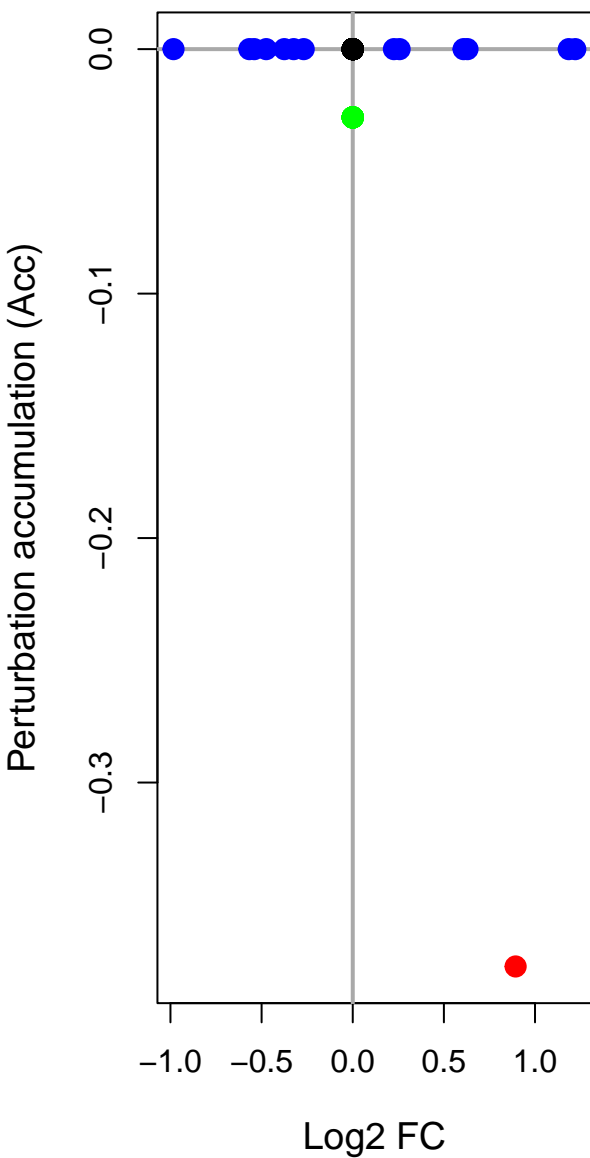
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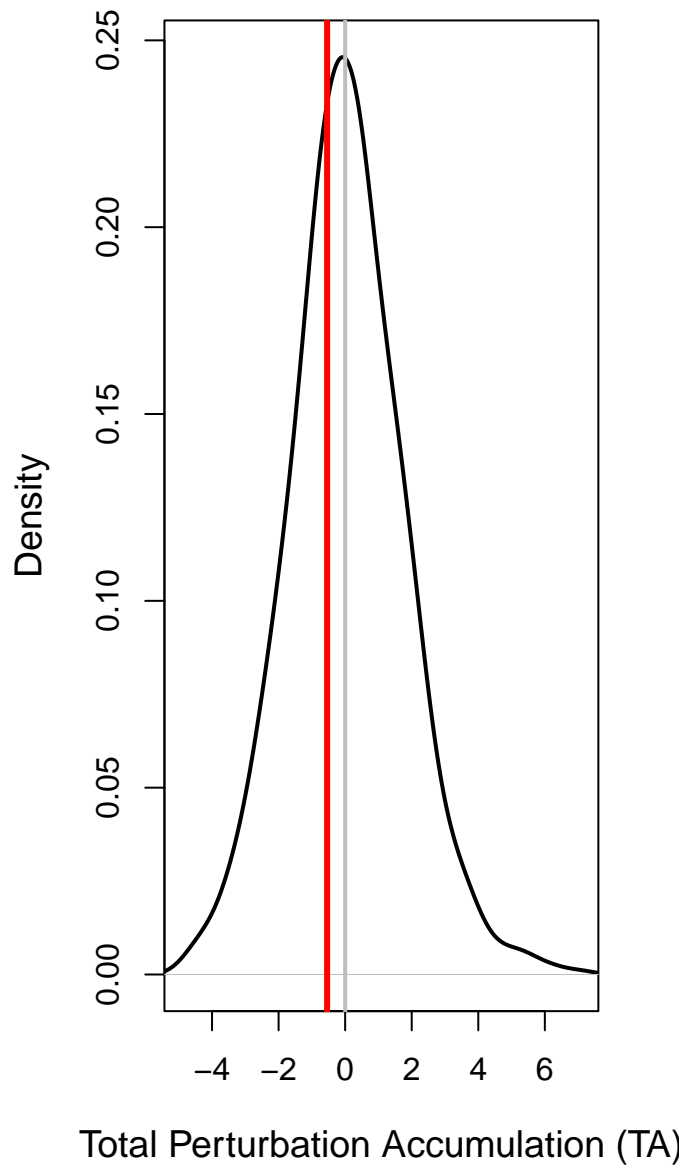
pathway ID=04610 P PERT=0.577



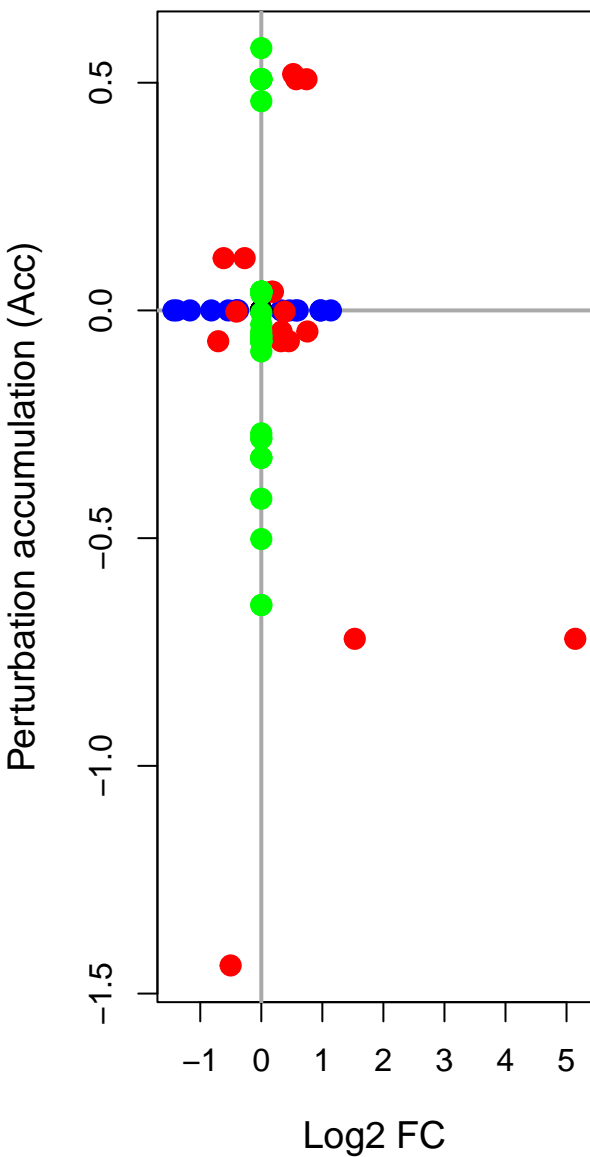
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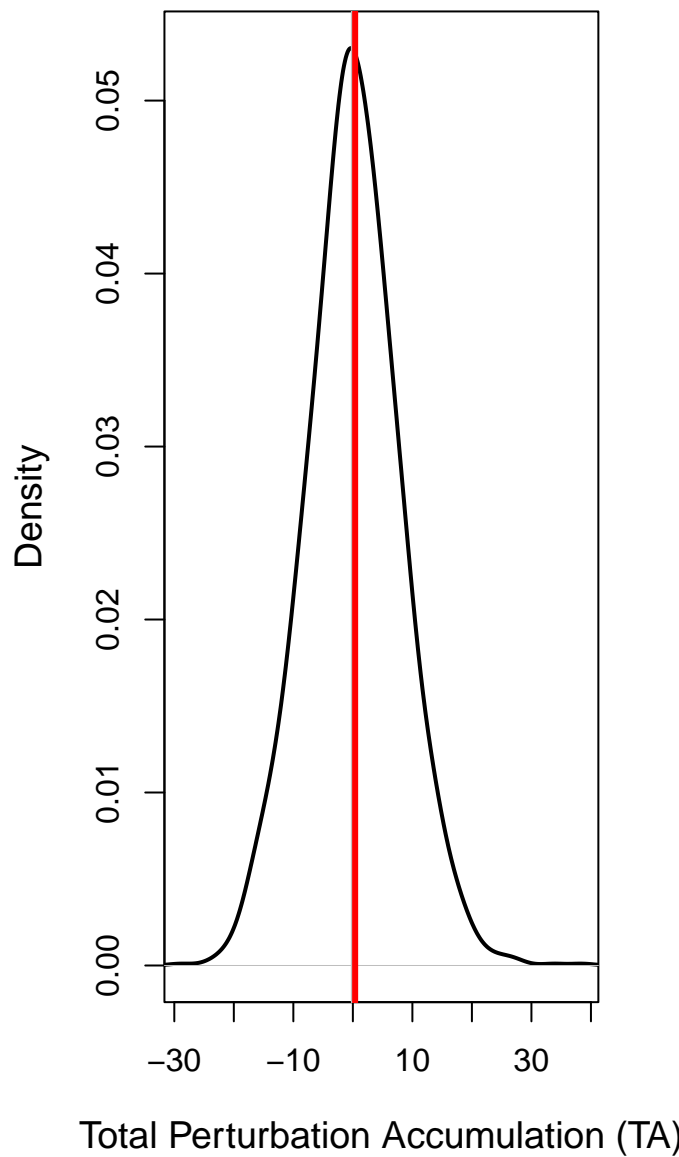
pathway ID=04612 P PERT=0.719



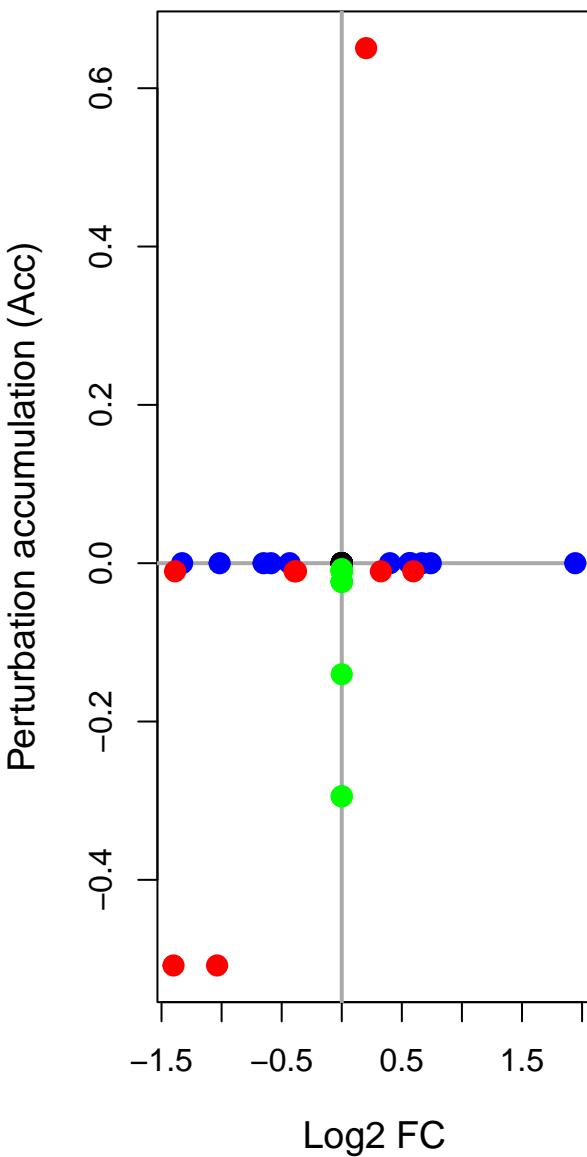
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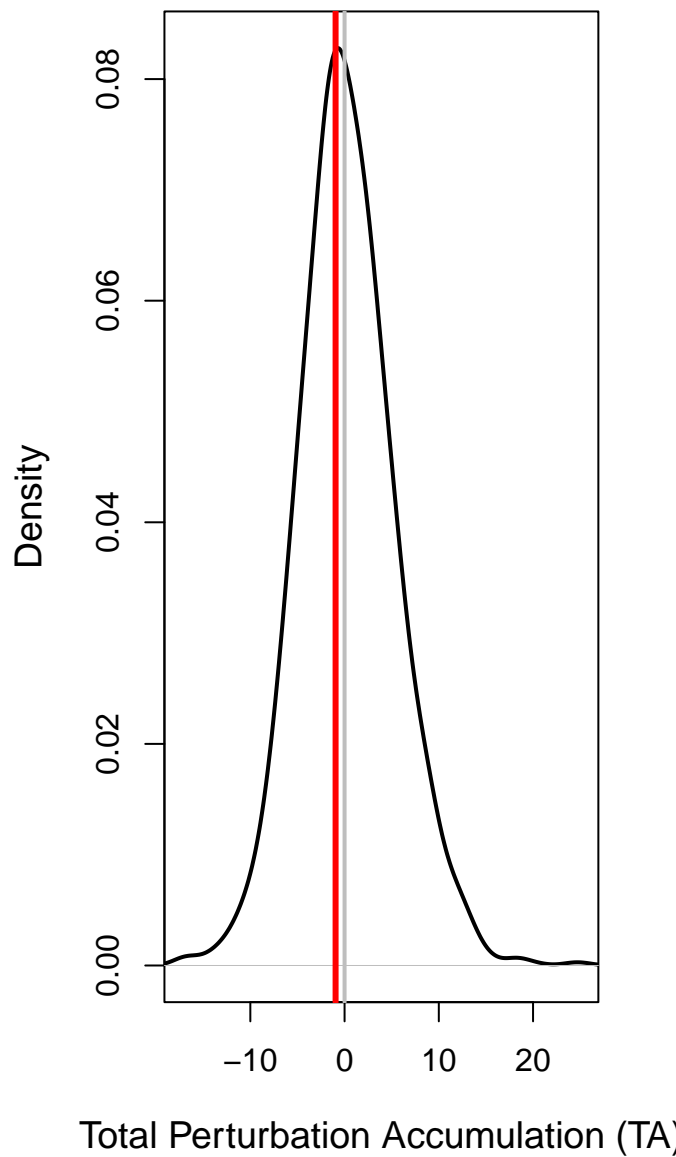
pathway ID=04620 P PERT=0.959



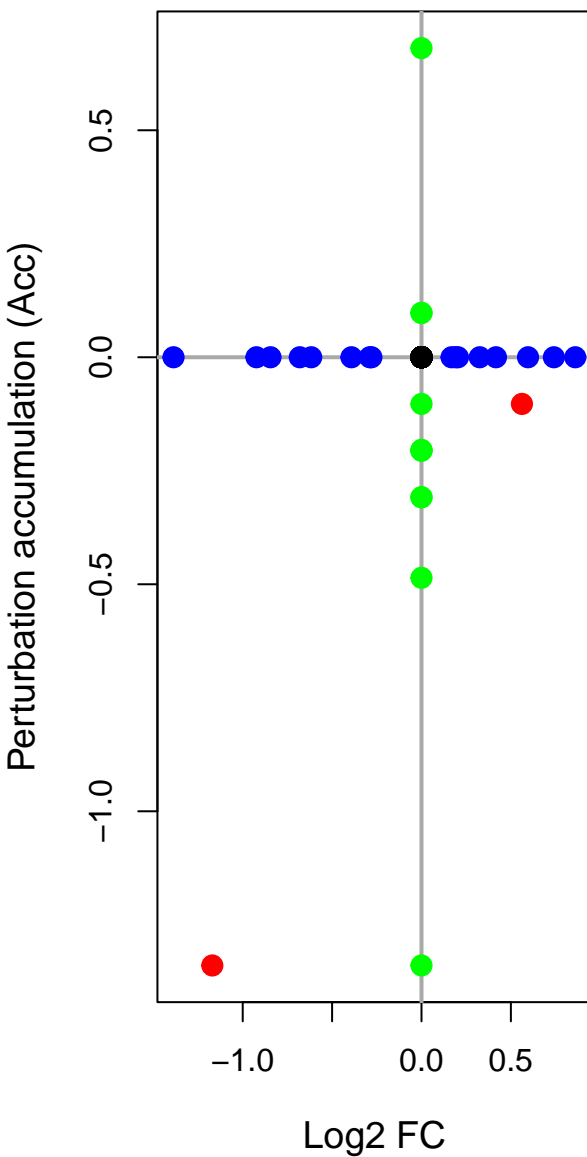
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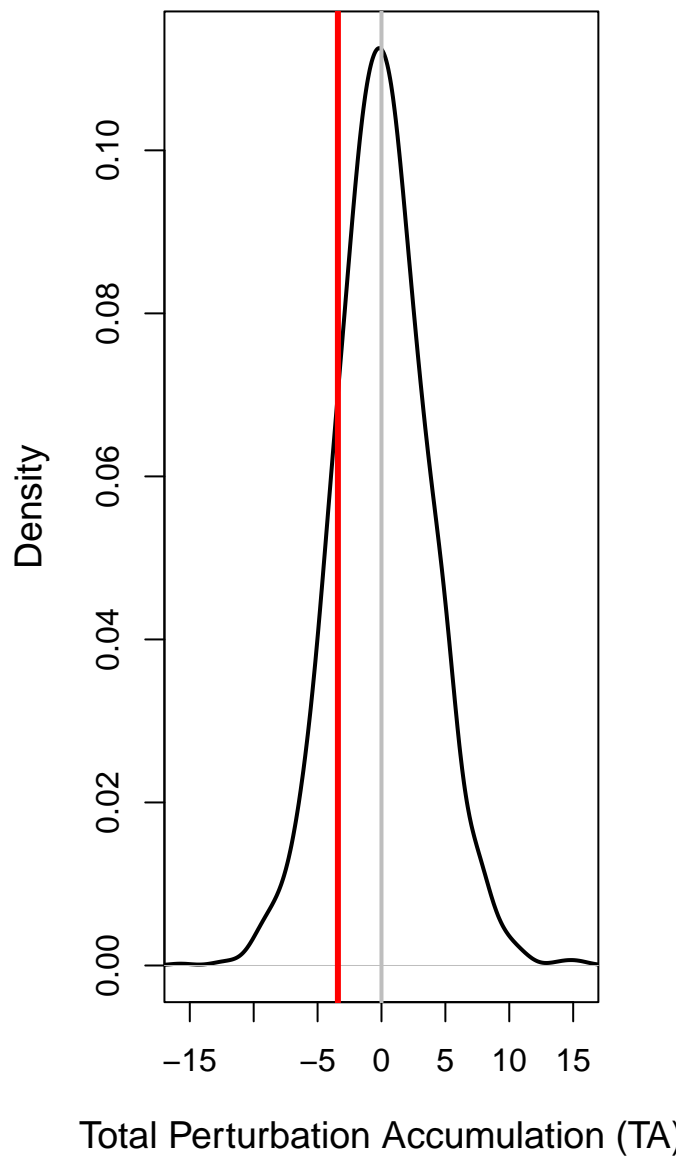
pathway ID=04621 P PERT=0.836



pathway ID=04622

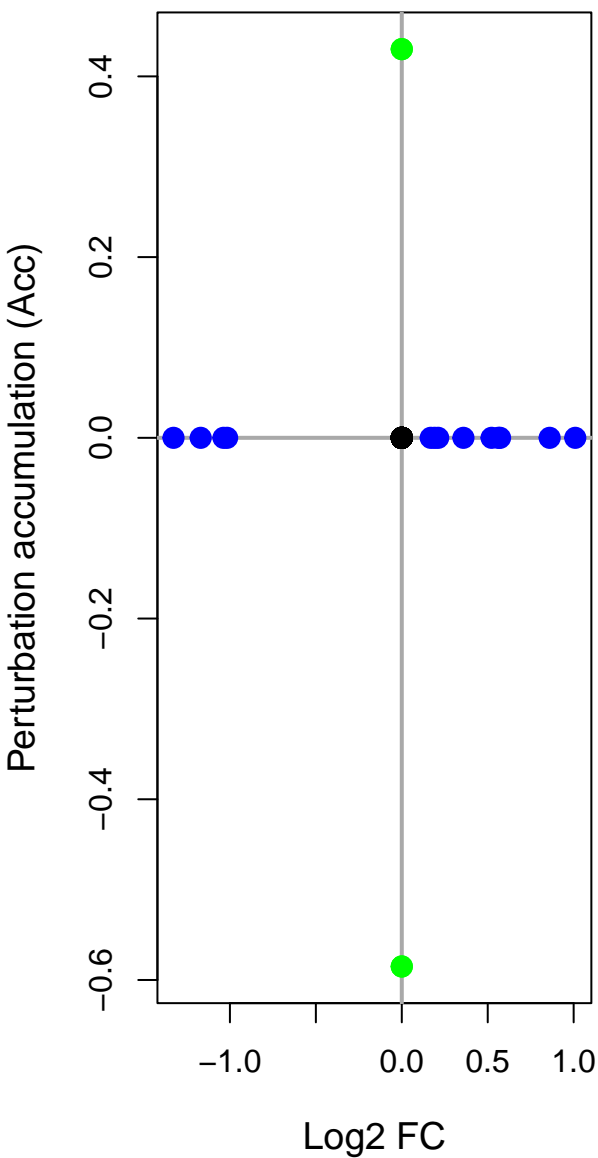


pathway ID=04622 P PERT=0.326

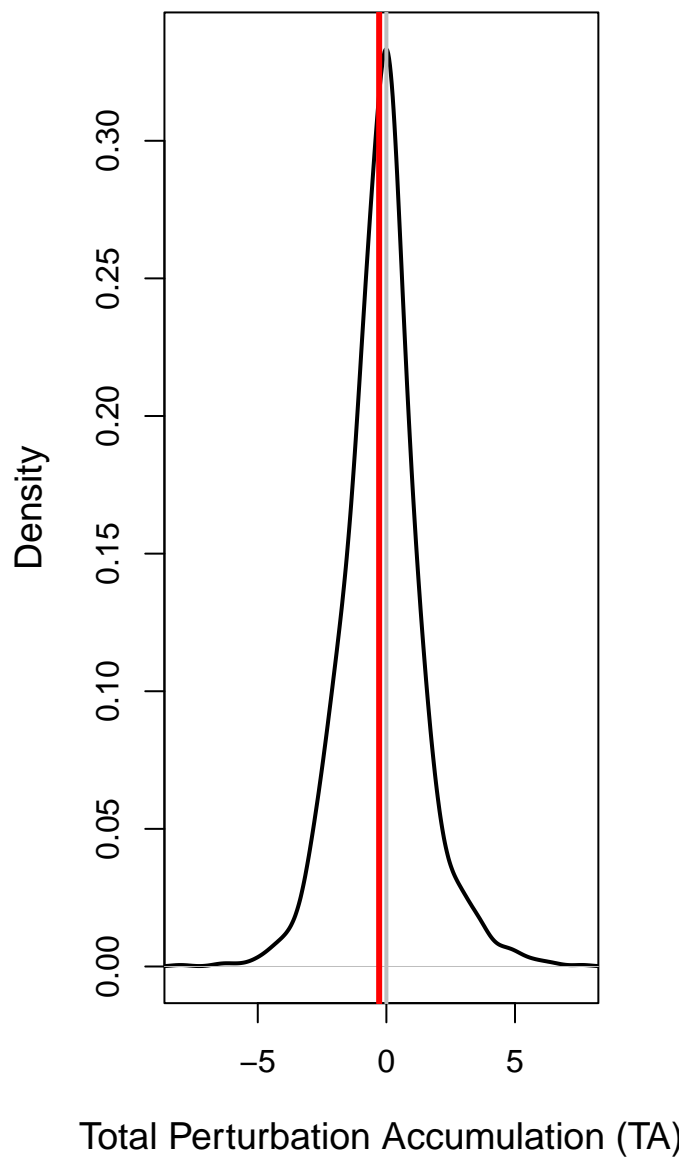




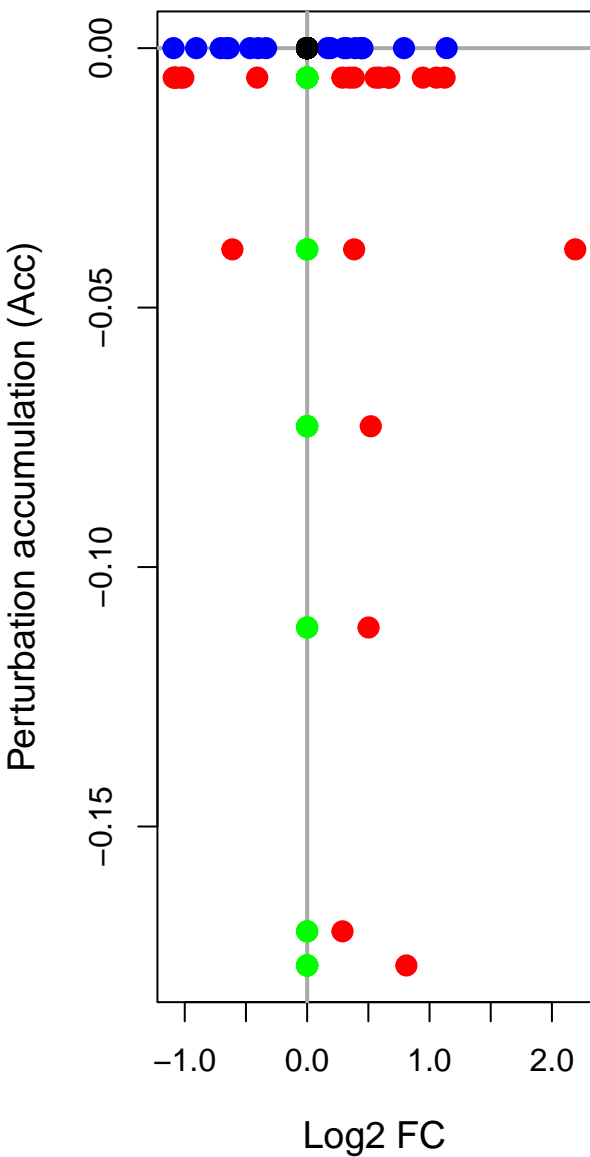
pathway ID=04623



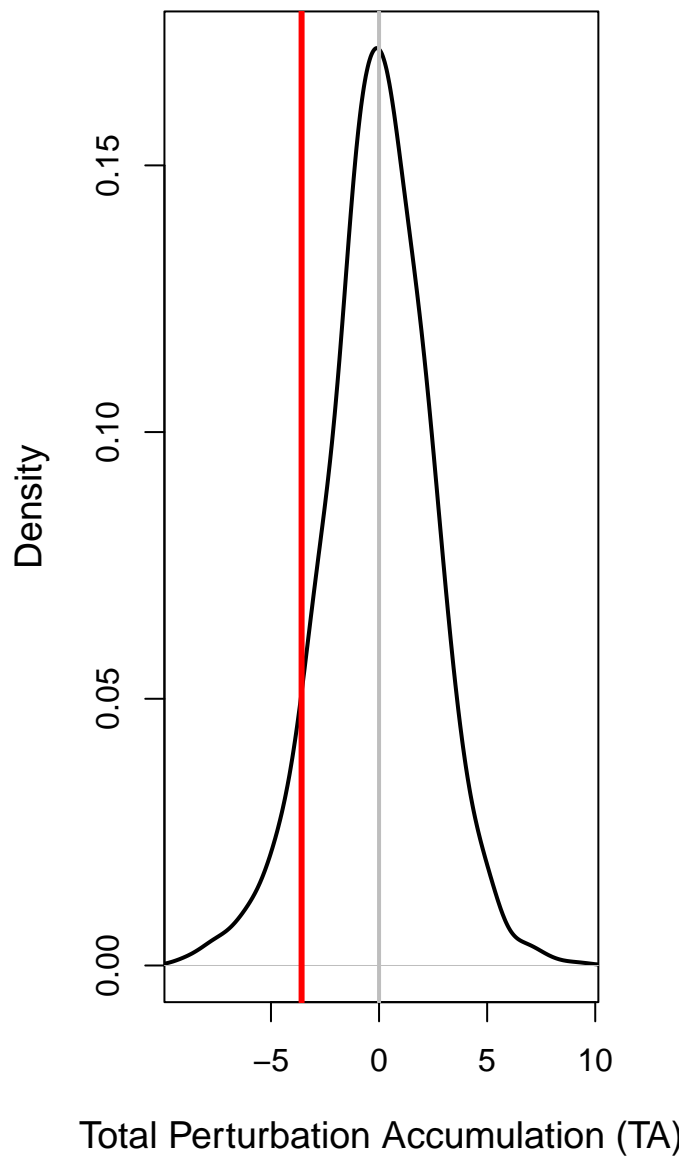
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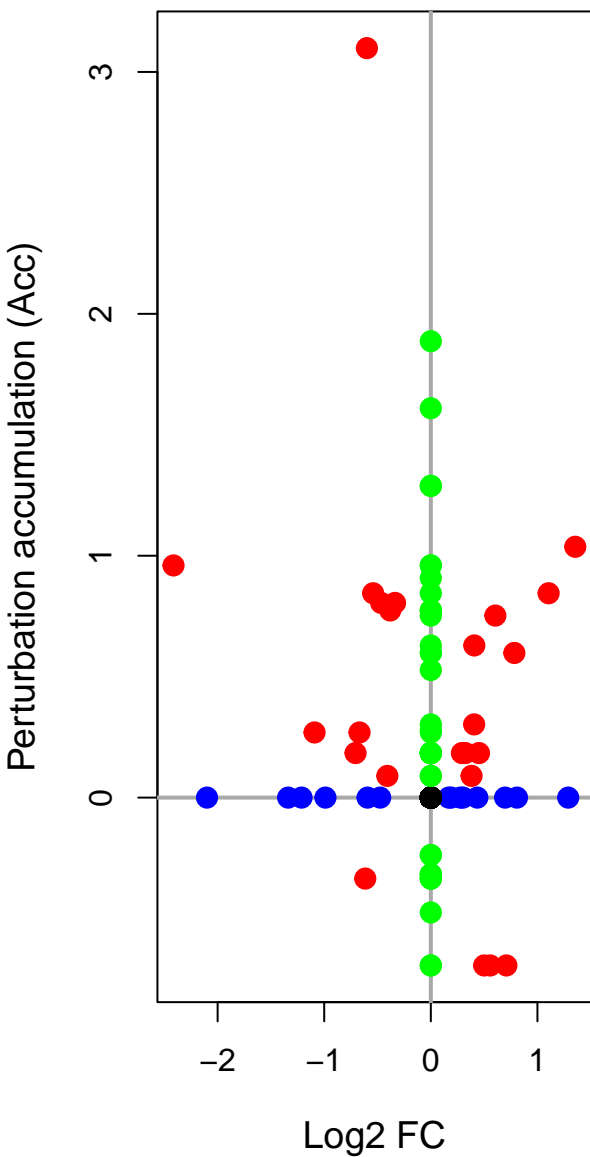
pathway ID=04630



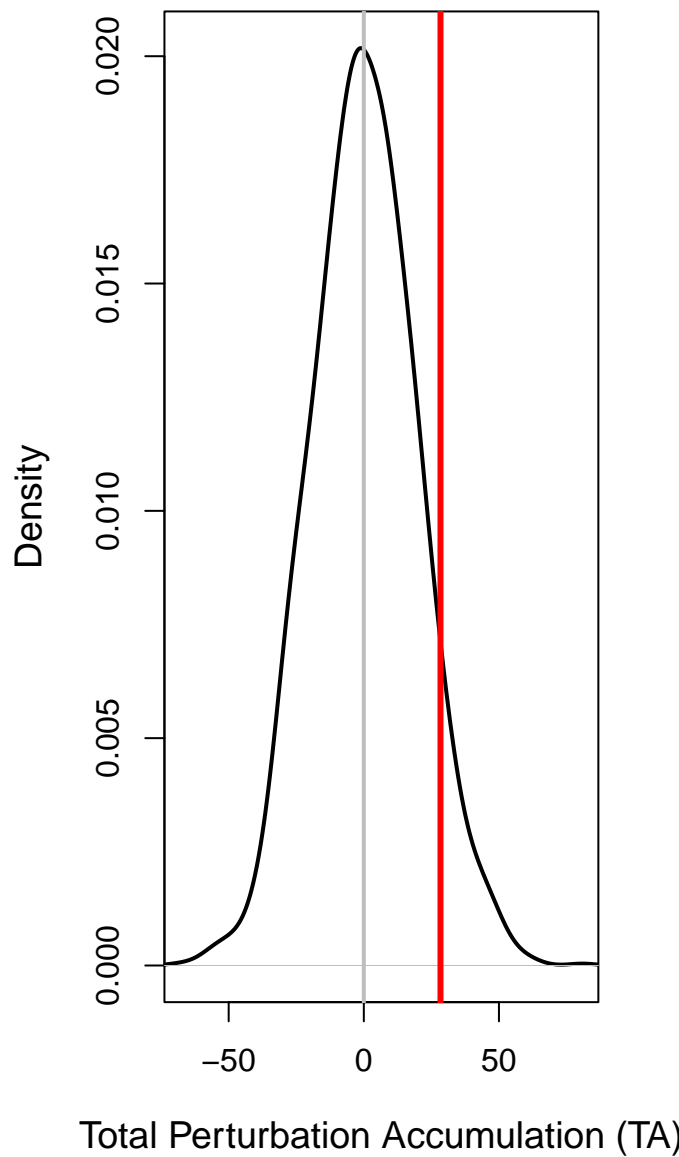
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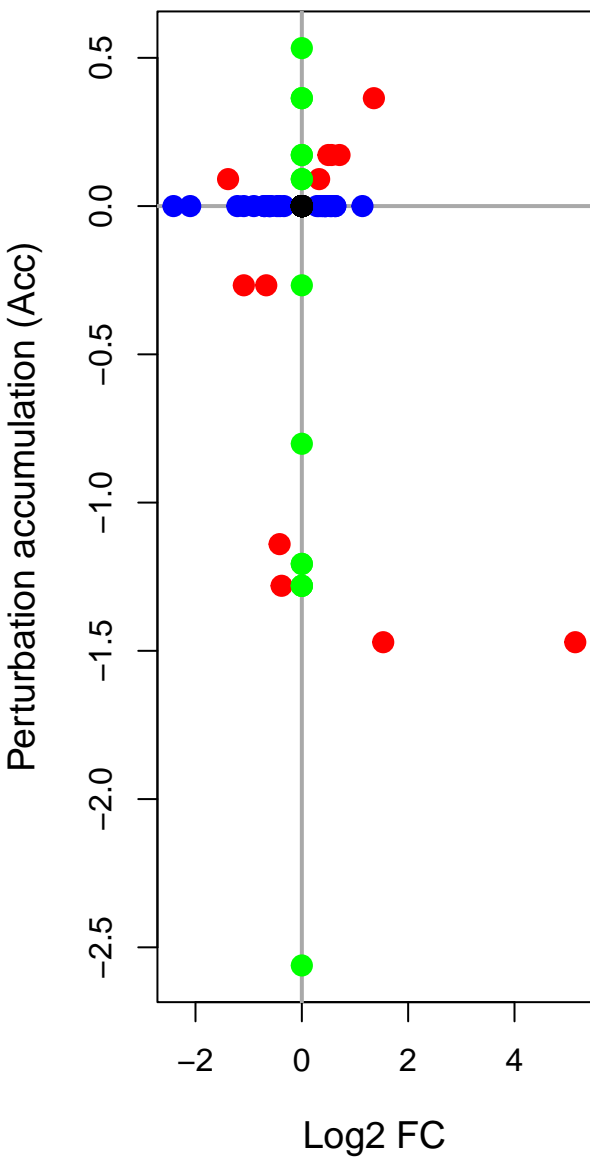
pathway ID=04650



pathway ID=04650 P PERT=0.15



pathway ID=04660

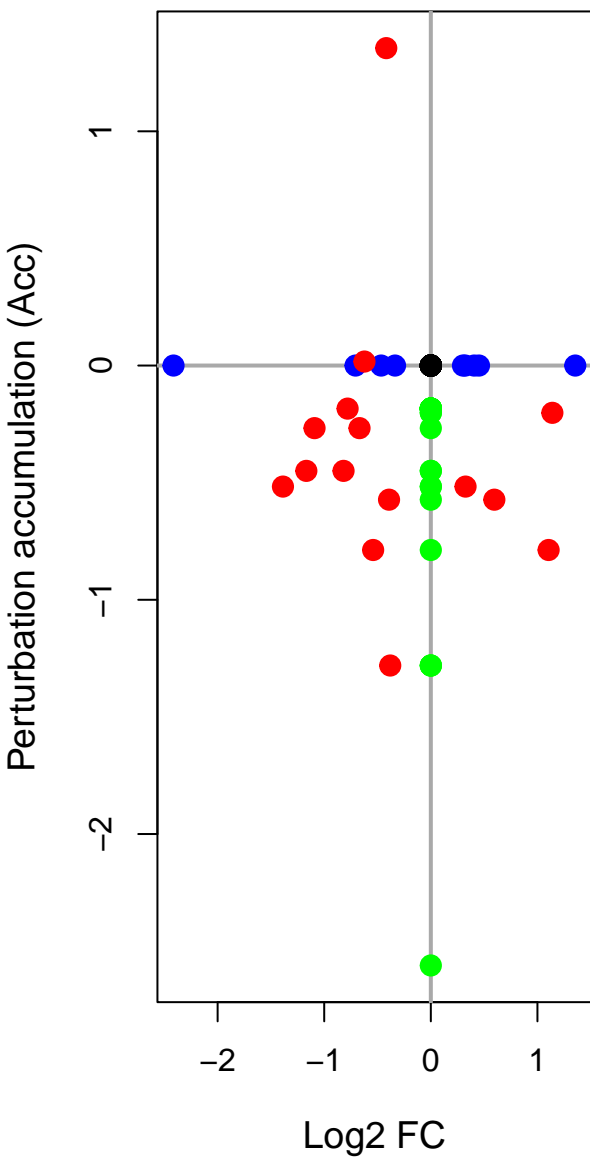


## Total Perturbation Accumulation (TA)

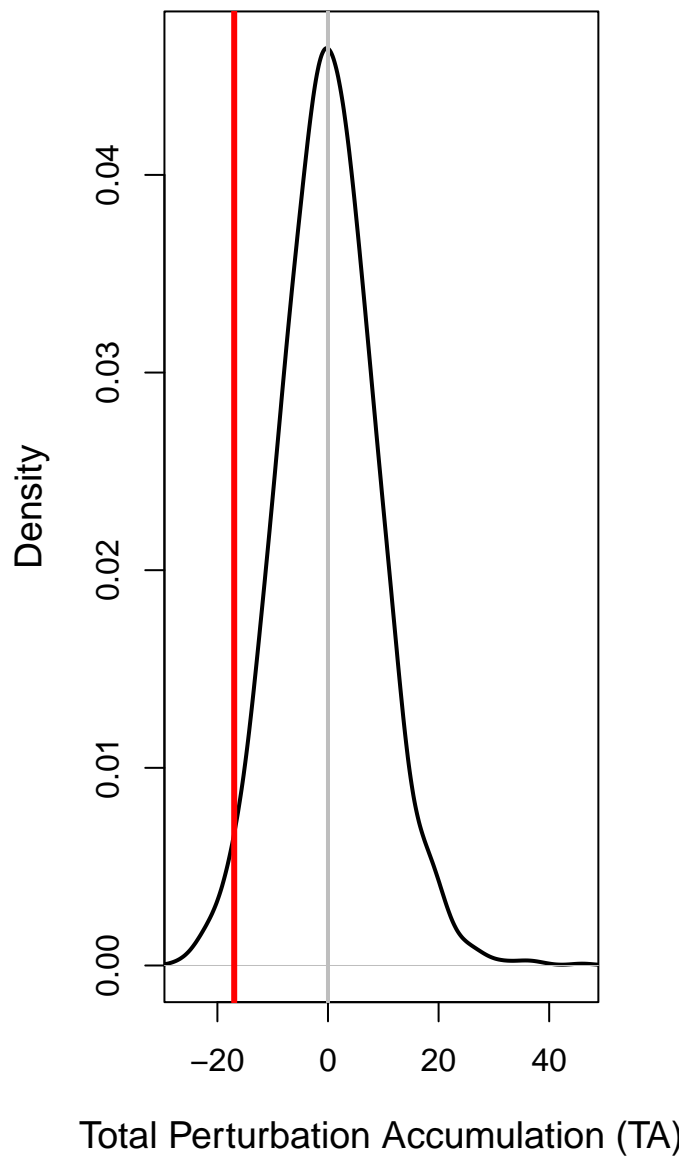
A plot of a Gaussian distribution. The x-axis ranges from -30 to 40, with major ticks at -20, 0, 20, and 40. The y-axis ranges from 0.00 to 0.05, with major ticks at 0.00, 0.01, 0.02, 0.03, 0.04, and 0.05. A black curve represents the probability density function, peaking at approximately 0.048 at x = 0. A thick red vertical line is drawn at approximately x = -10, representing the mean. A thin grey vertical line is drawn at x = 0, representing the median. The red line is to the left of the grey line, indicating a left-skewed distribution.

## Total Perturbation Accumulation (TA)

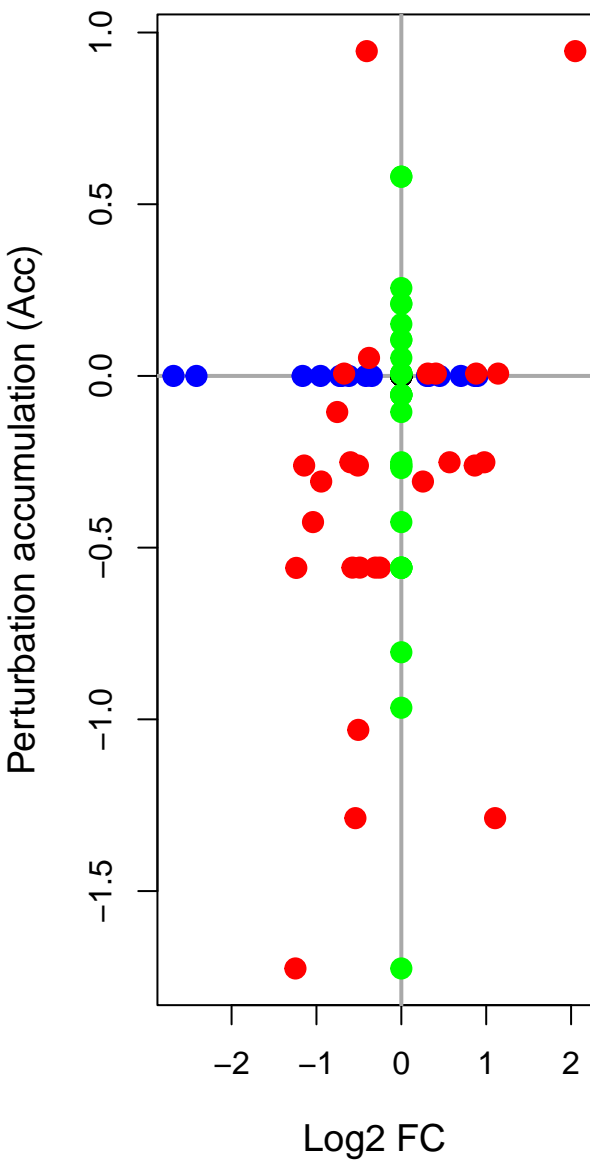
pathway ID=04664



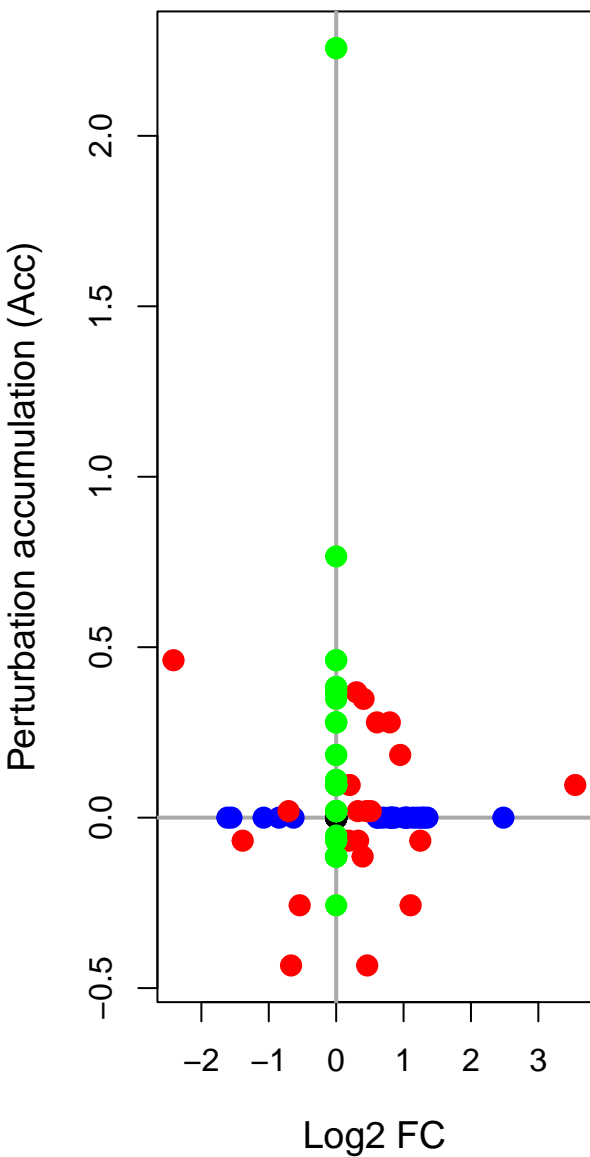
pathway ID=04664 P PERT=0.044



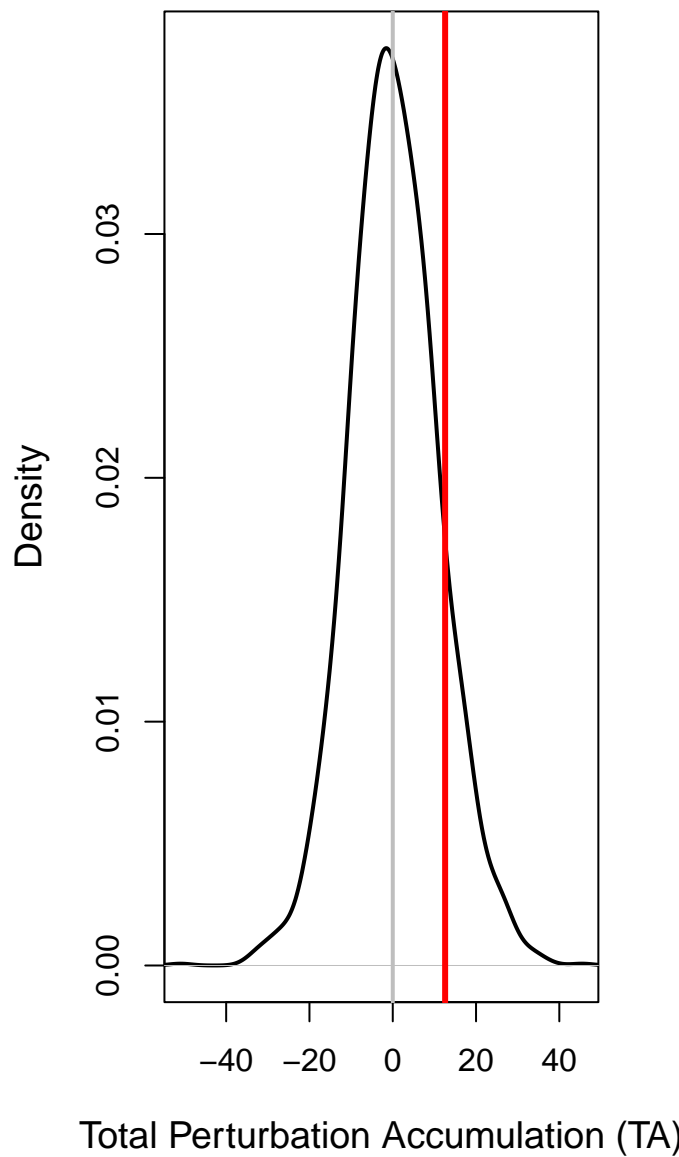
pathway ID=04666



pathway ID=04670

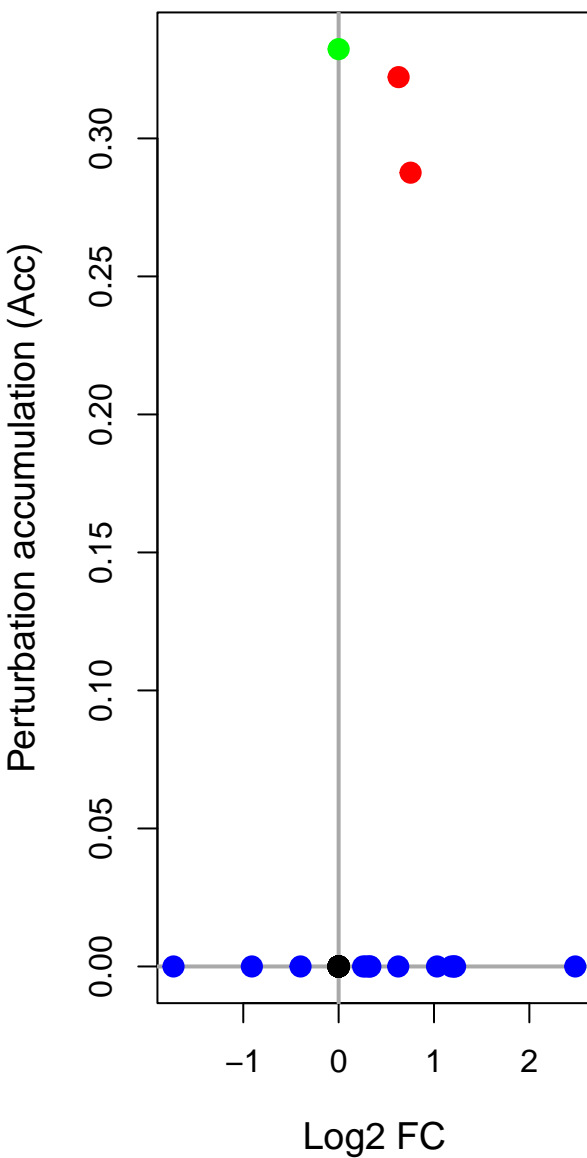


pathway ID=04670 P PERT=0.255

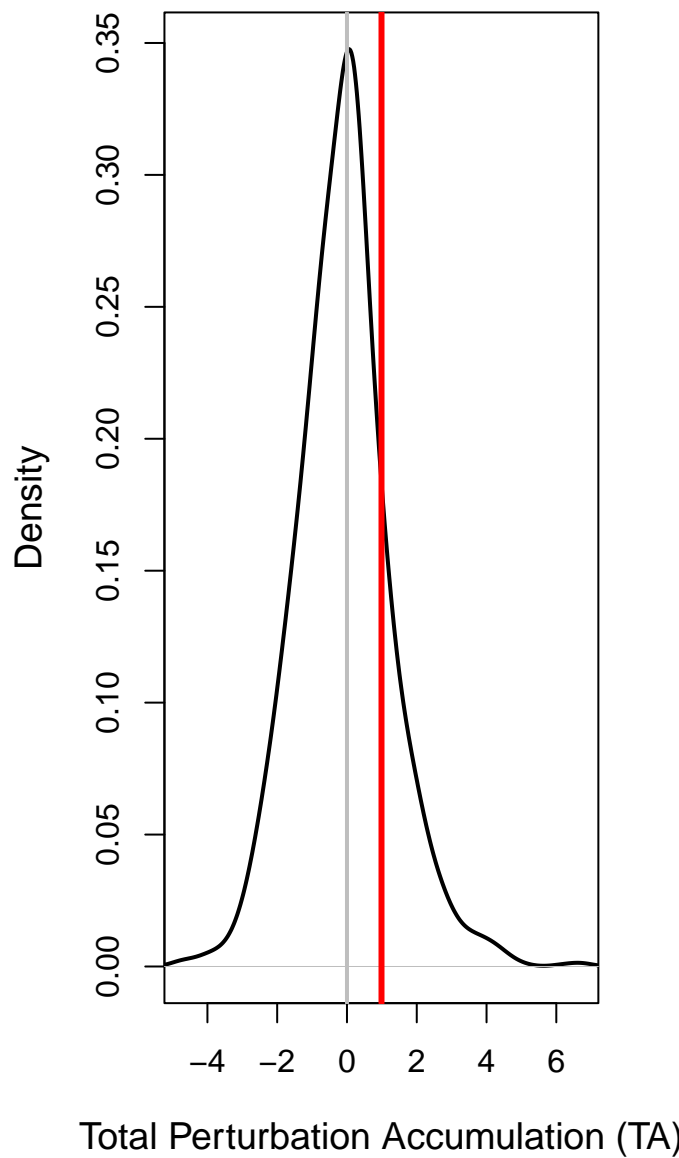




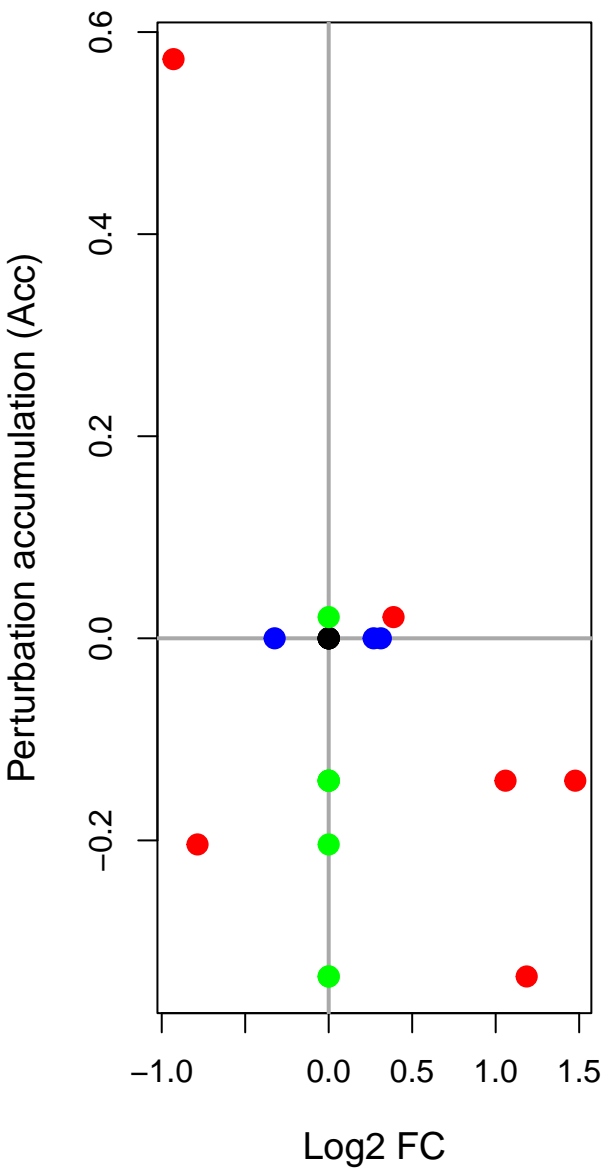
pathway ID=04672



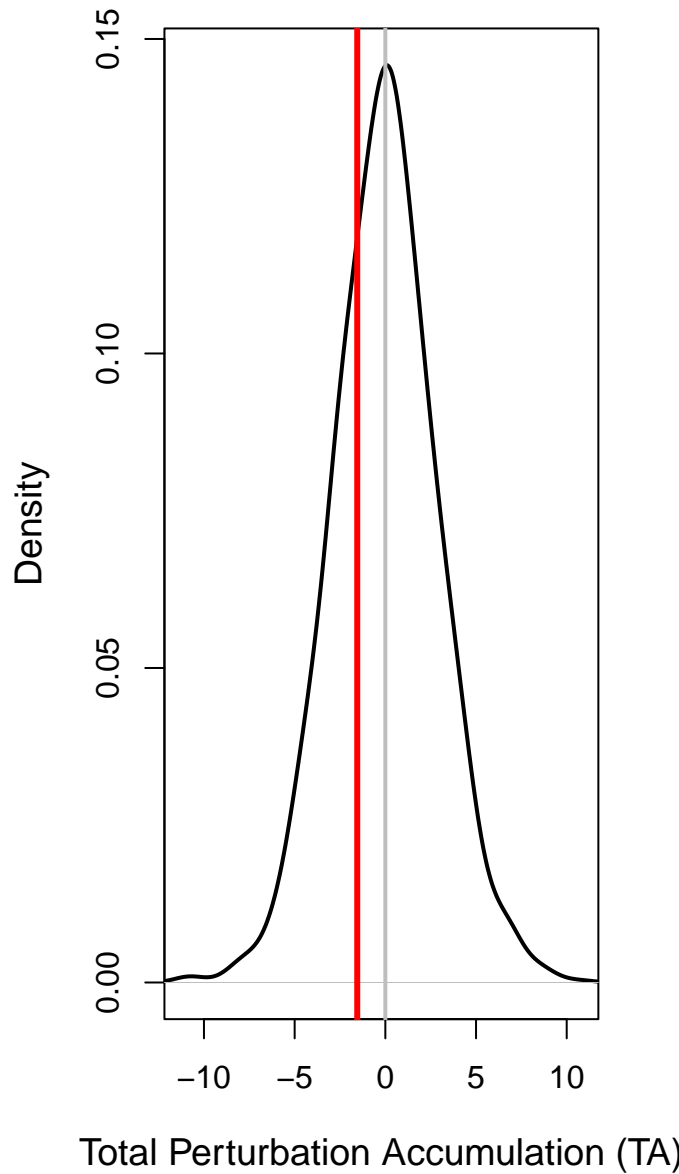
pathway ID=04672 P PERT=0.357



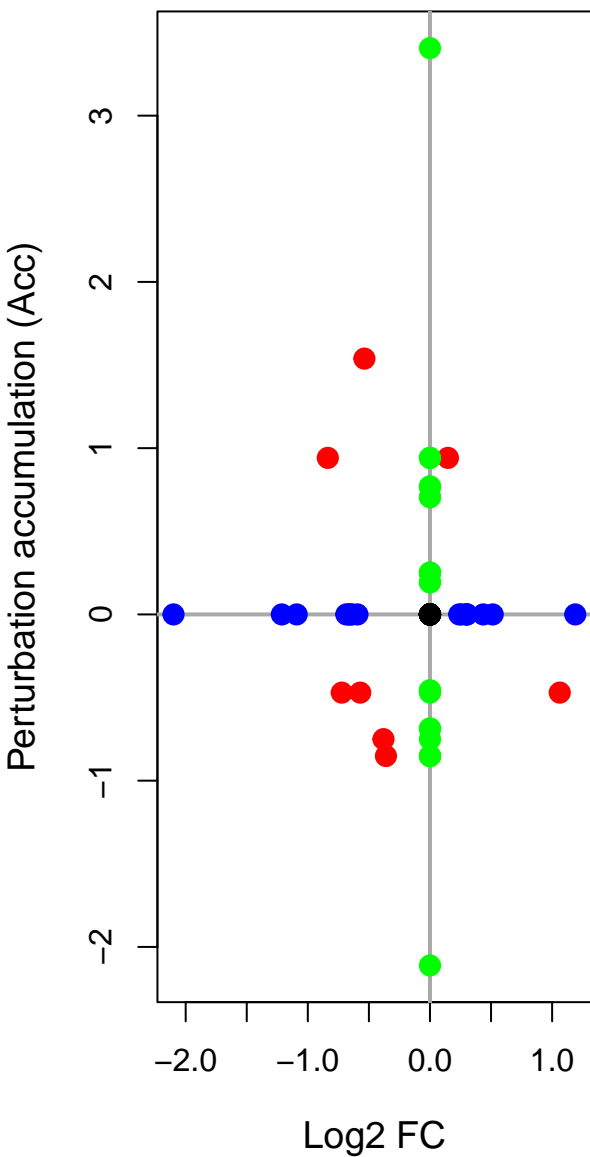
pathway ID=04710



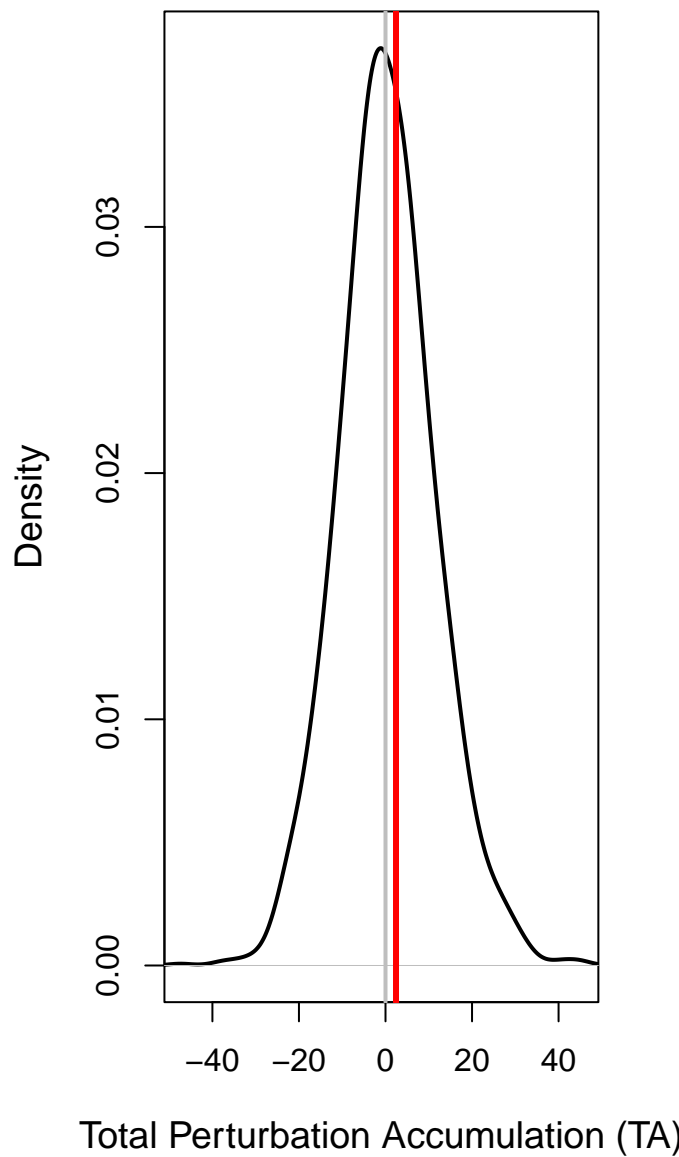
pathway ID=04710 P PERT=0.574



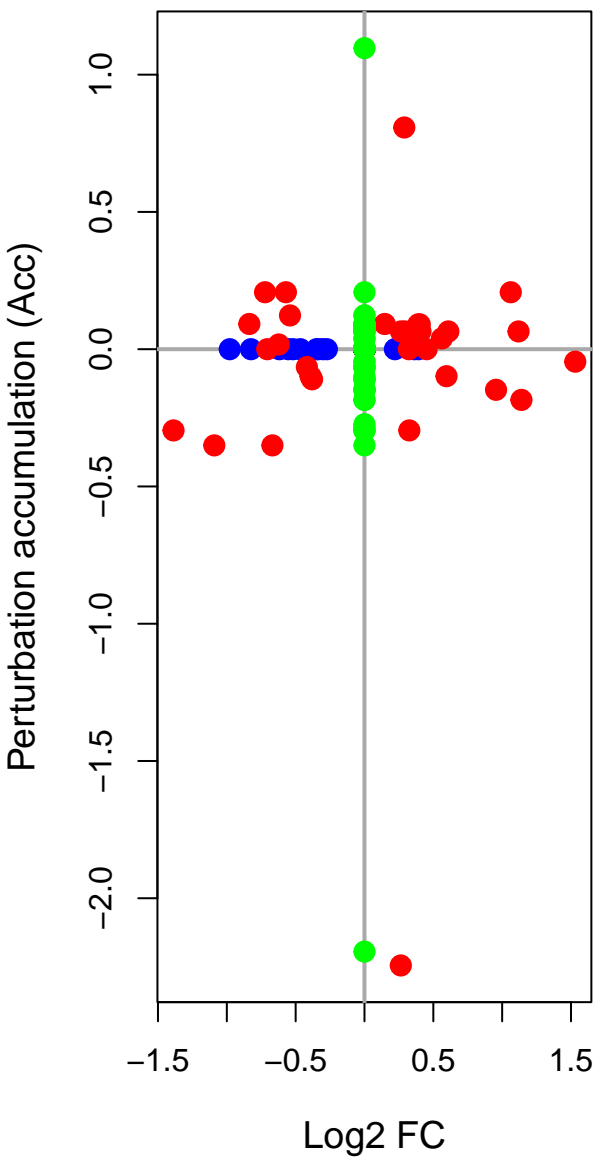
pathway ID=04720



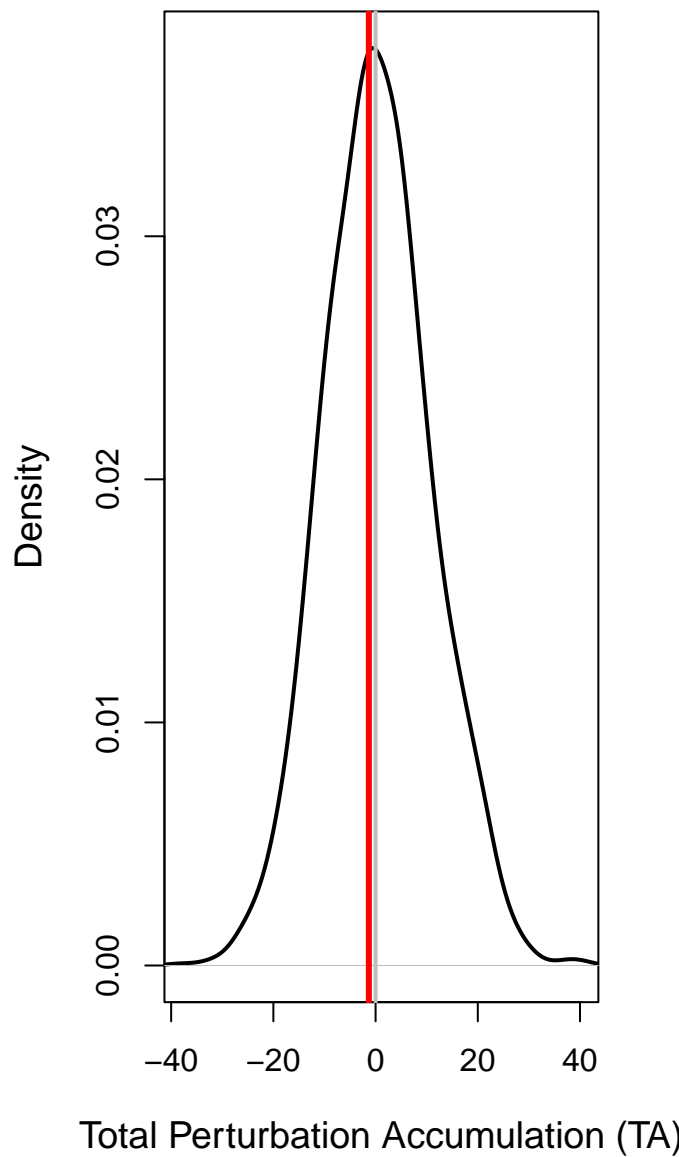
pathway ID=04720 P PERT=0.817



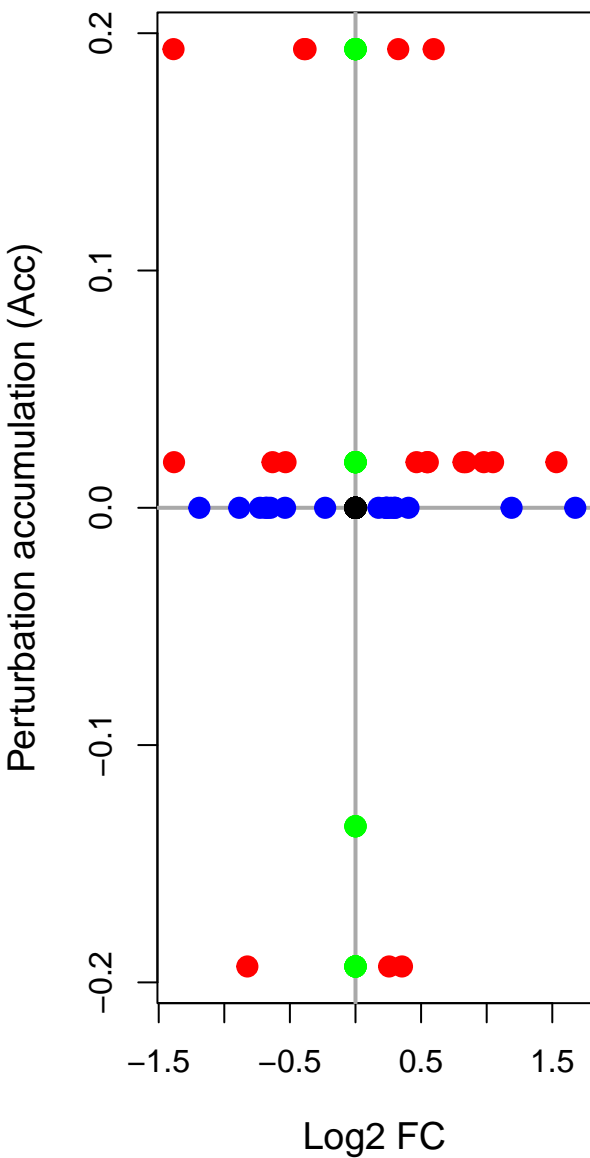
pathway ID=04722



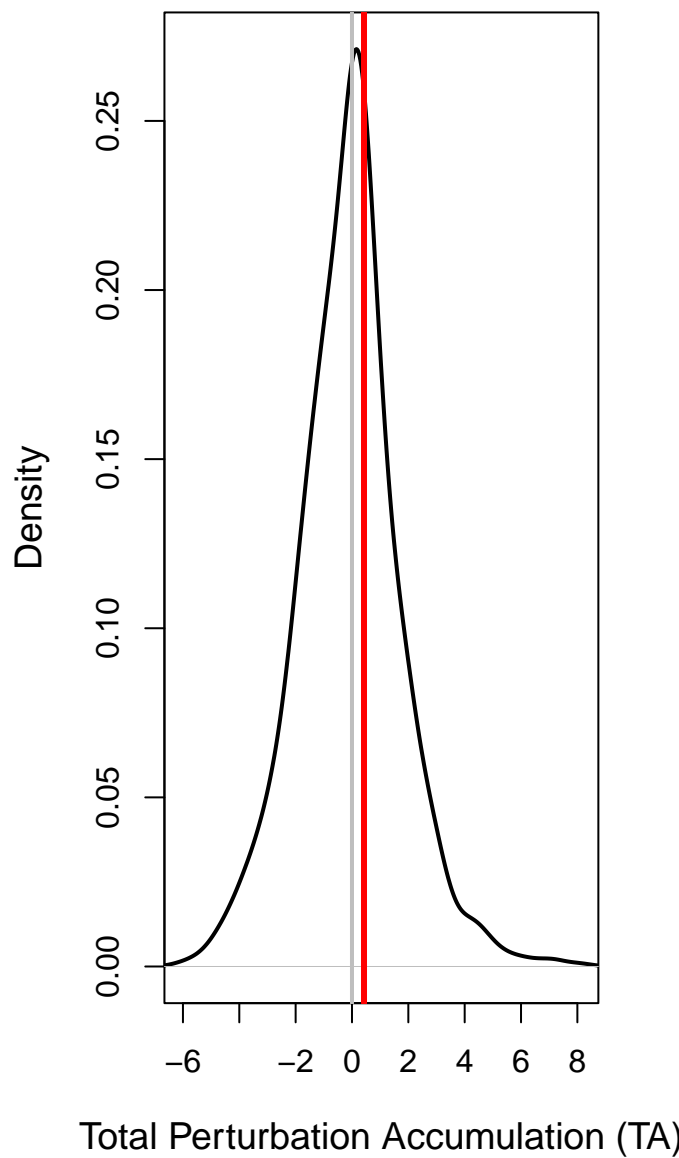
pathway ID=04722 P PERT=0.888



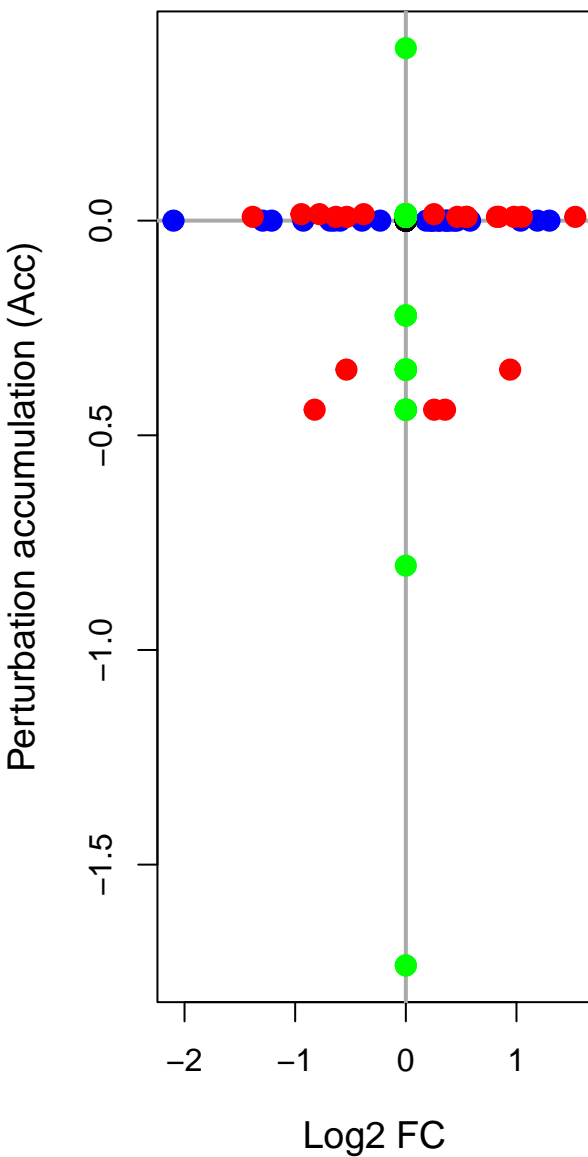
pathway ID=04723



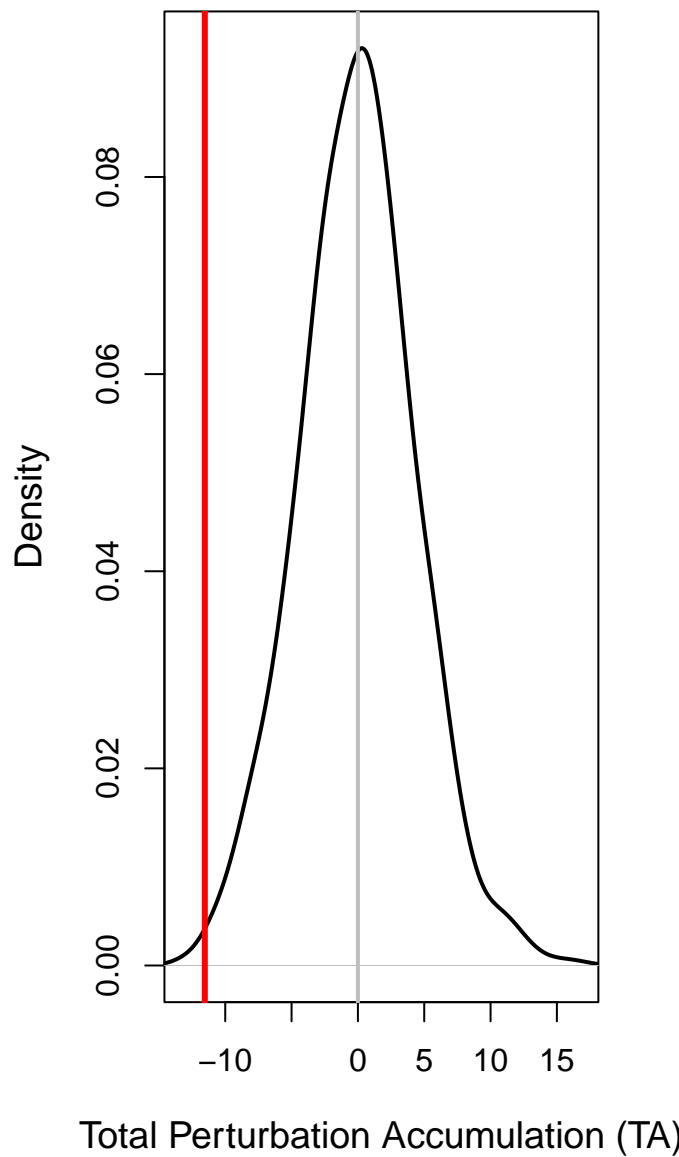
pathway ID=04723 P PERT=0.704



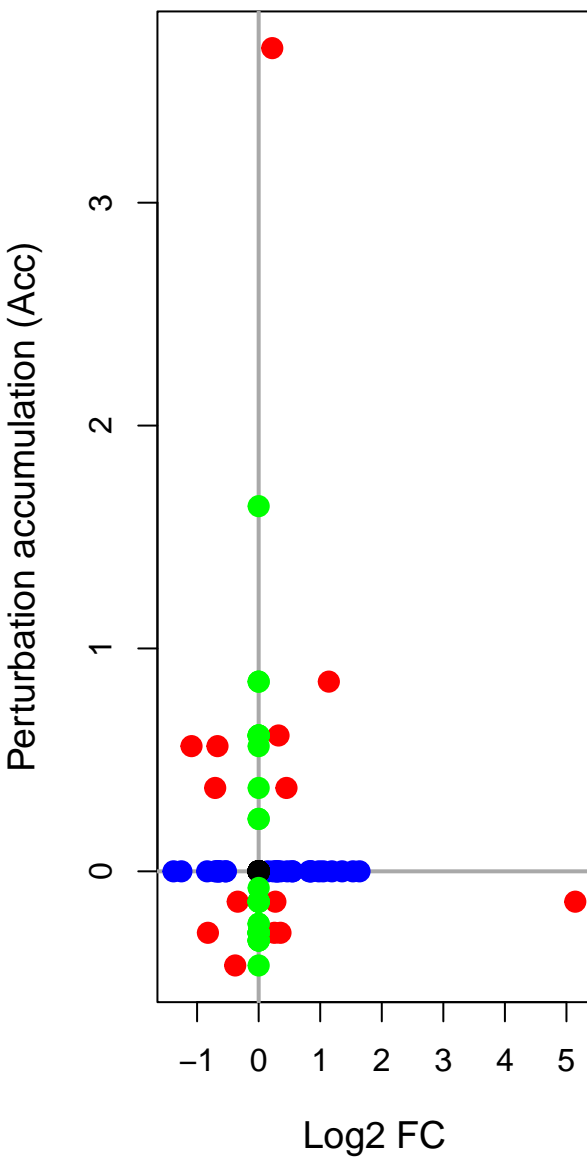
pathway ID=04724



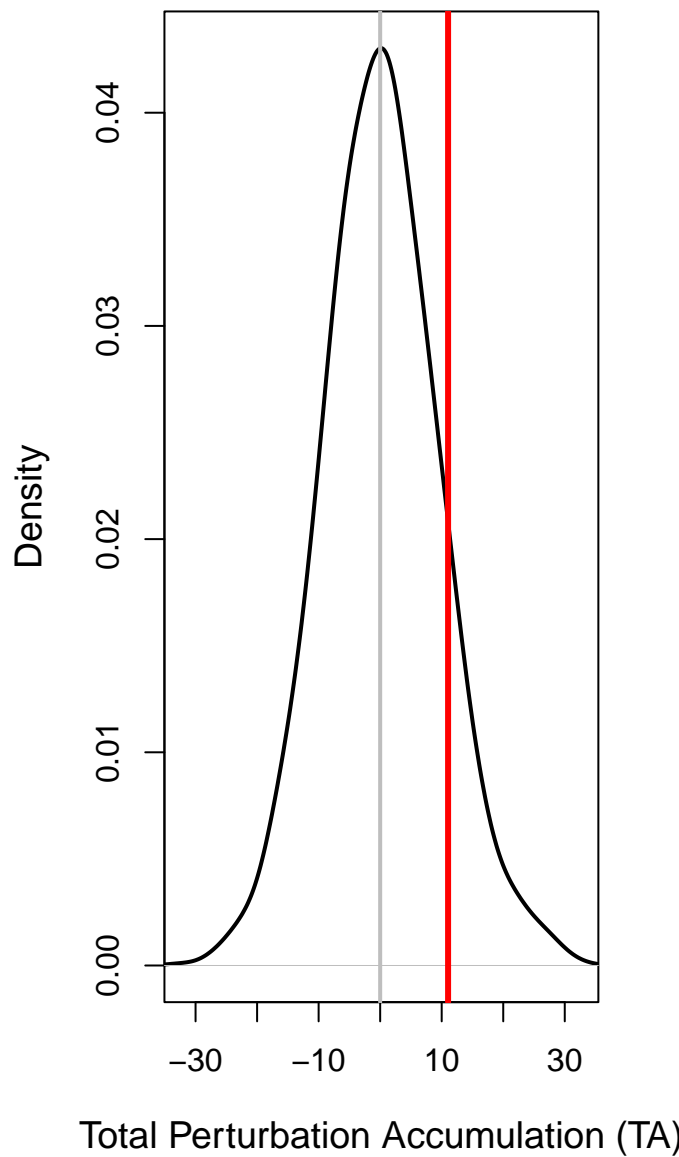
pathway ID=04724 P PERT=0.005



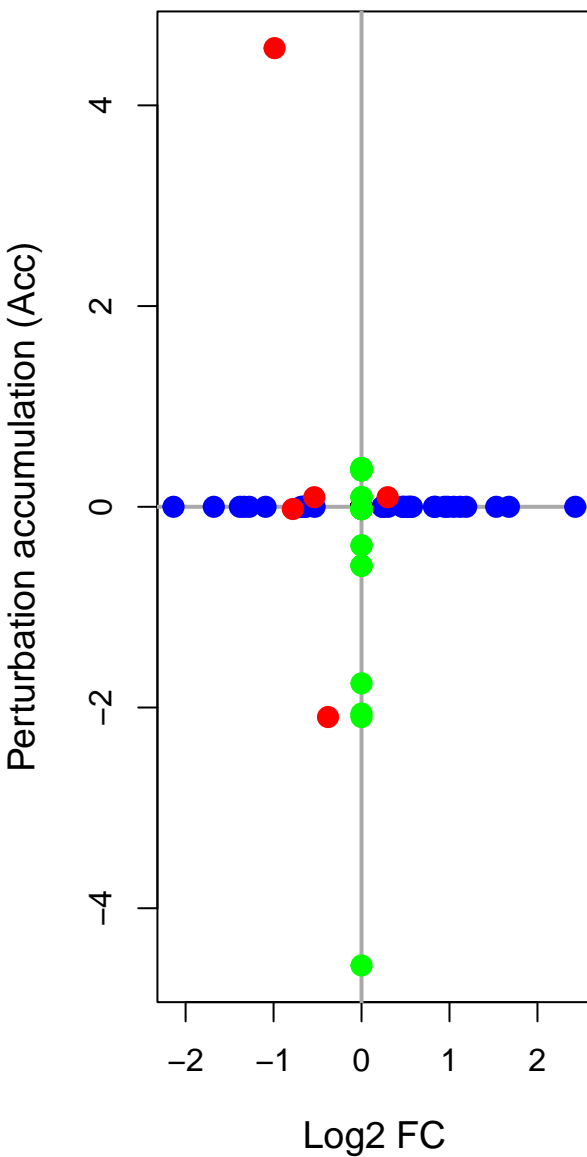
pathway ID=04725



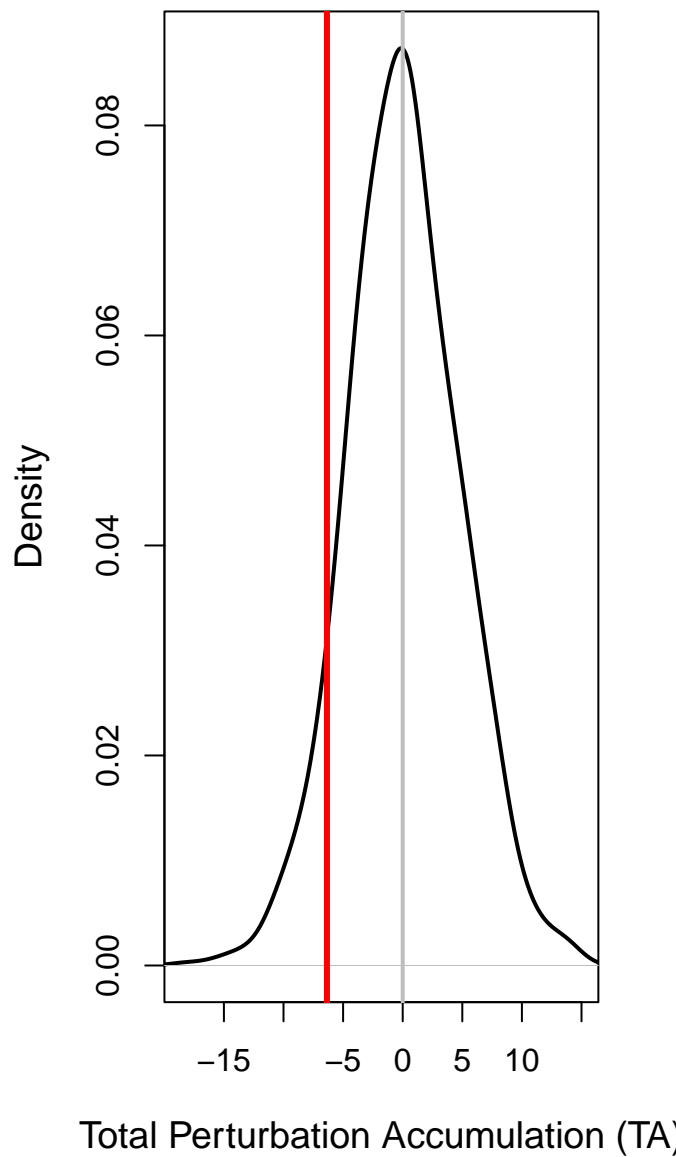
pathway ID=04725 P PERT=0.244



pathway ID=04726

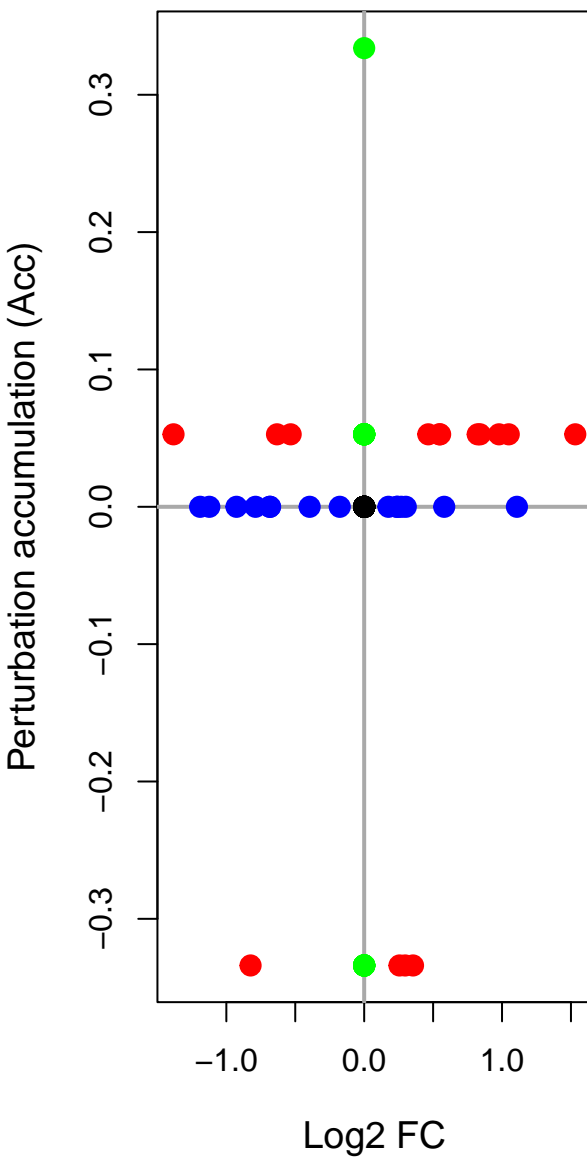


pathway ID=04726 P PERT=0.158

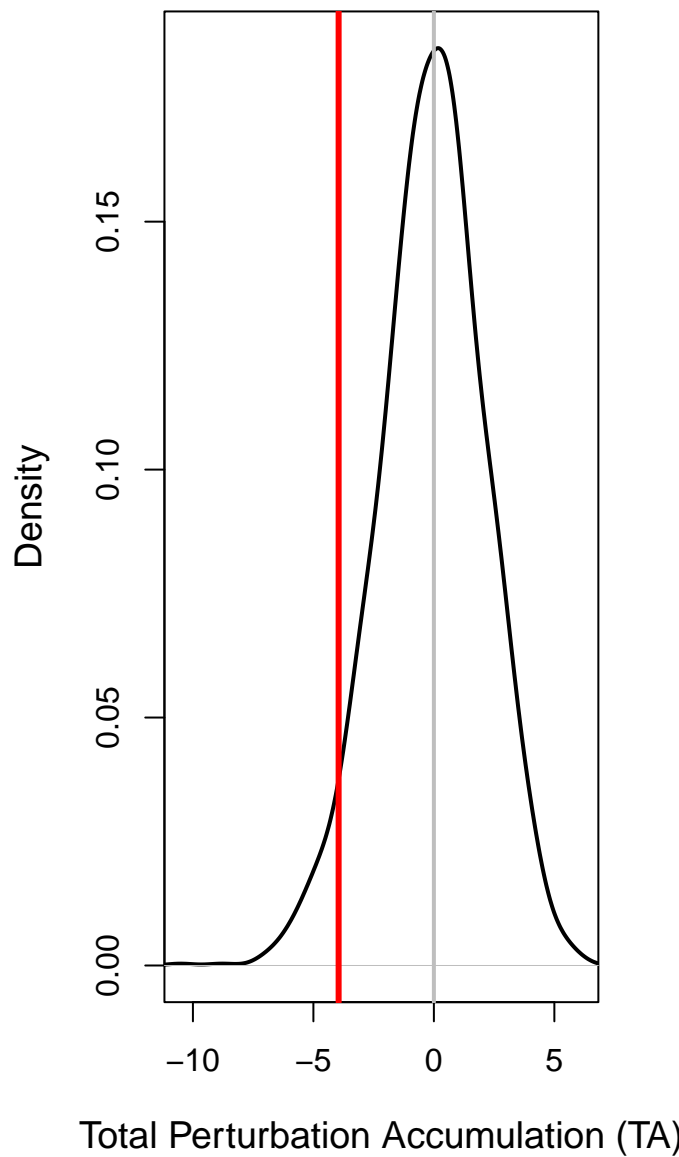




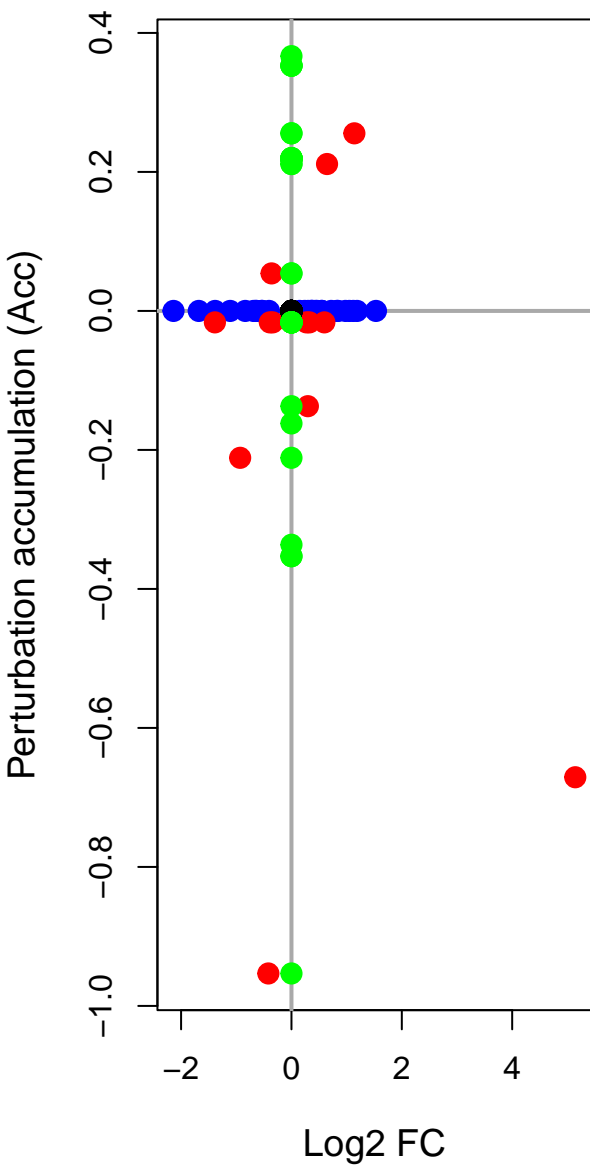
pathway ID=04727



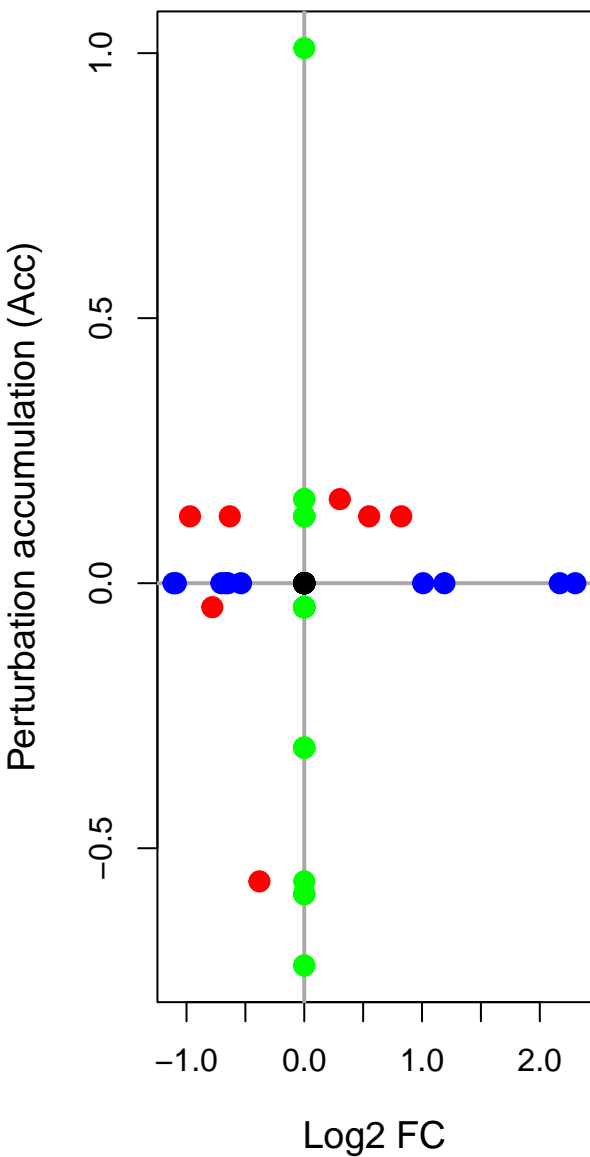
pathway ID=04727 P PERT=0.085



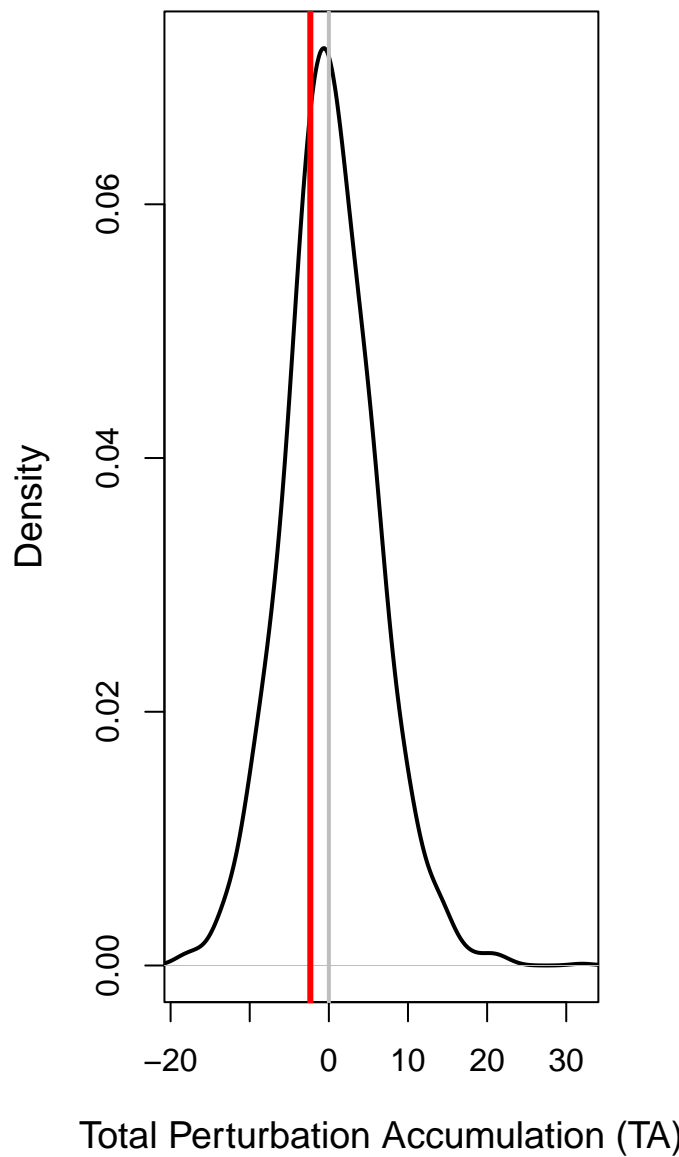
pathway ID=04728



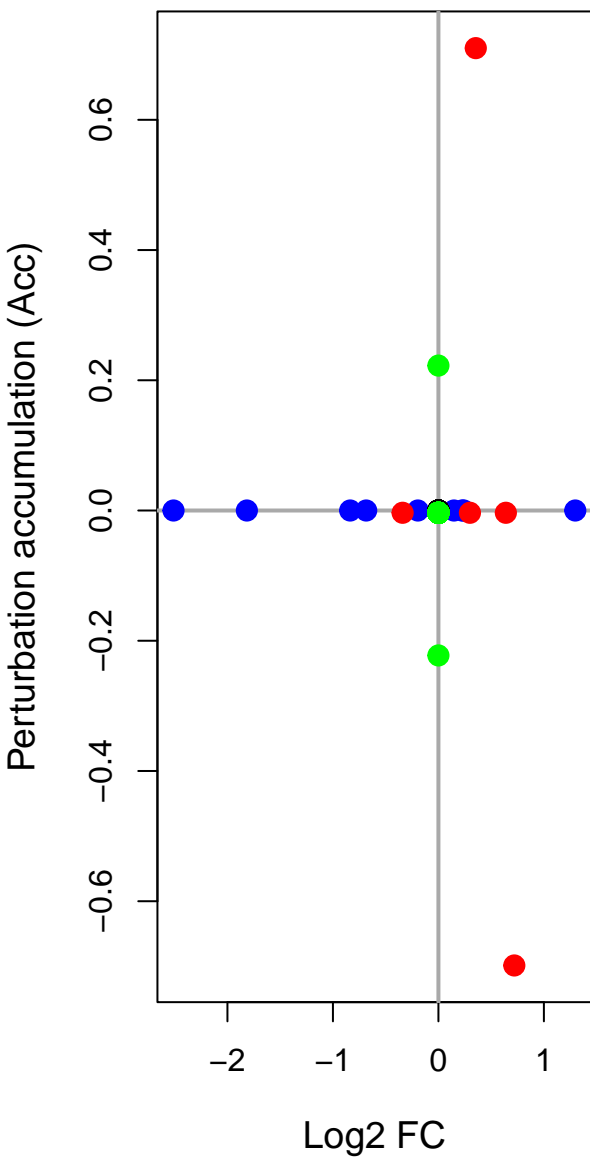
pathway ID=04730



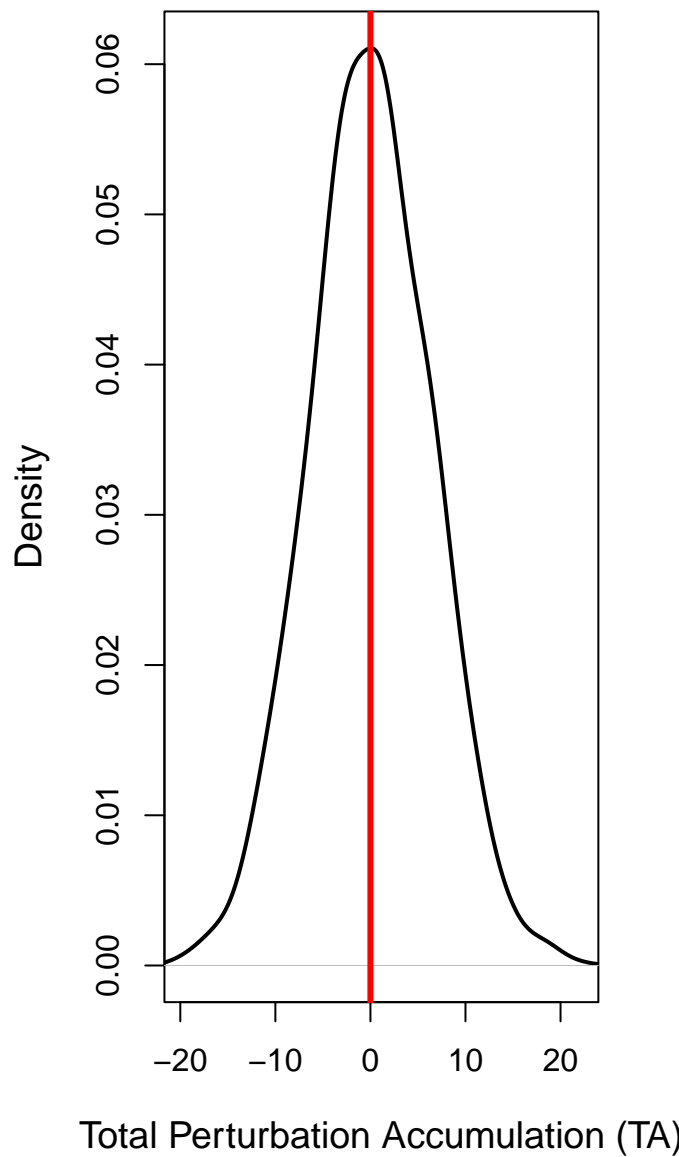
pathway ID=04730 P PERT=0.653



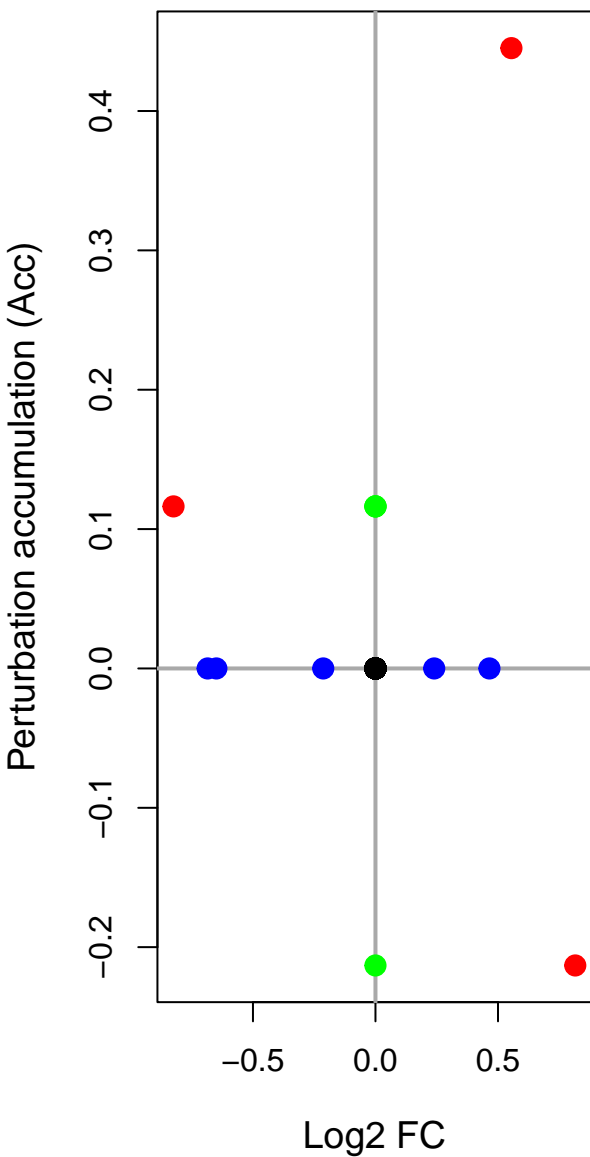
pathway ID=04740



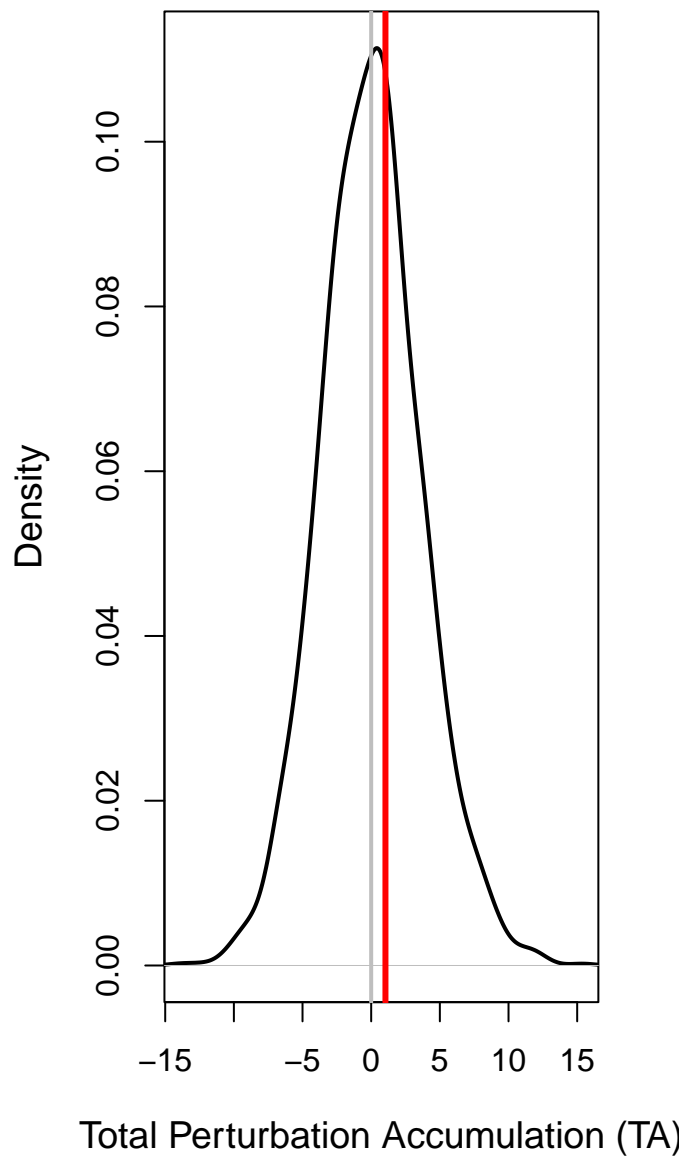
pathway ID=04740 P PERT=1



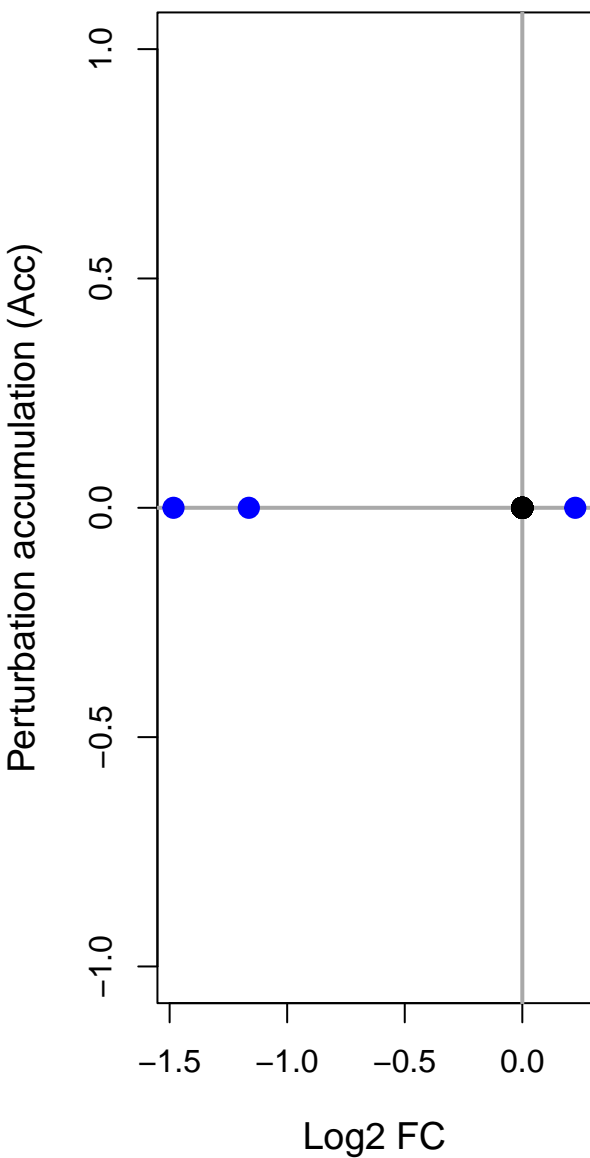
pathway ID=04742



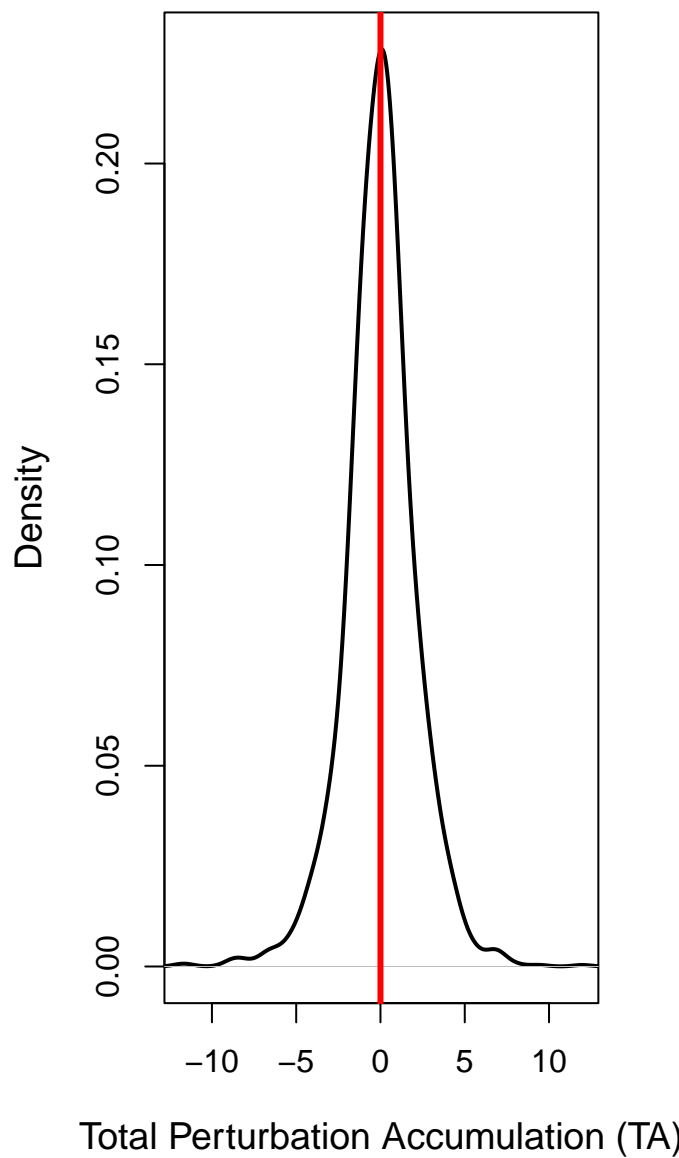
pathway ID=04742 P PERT=0.749



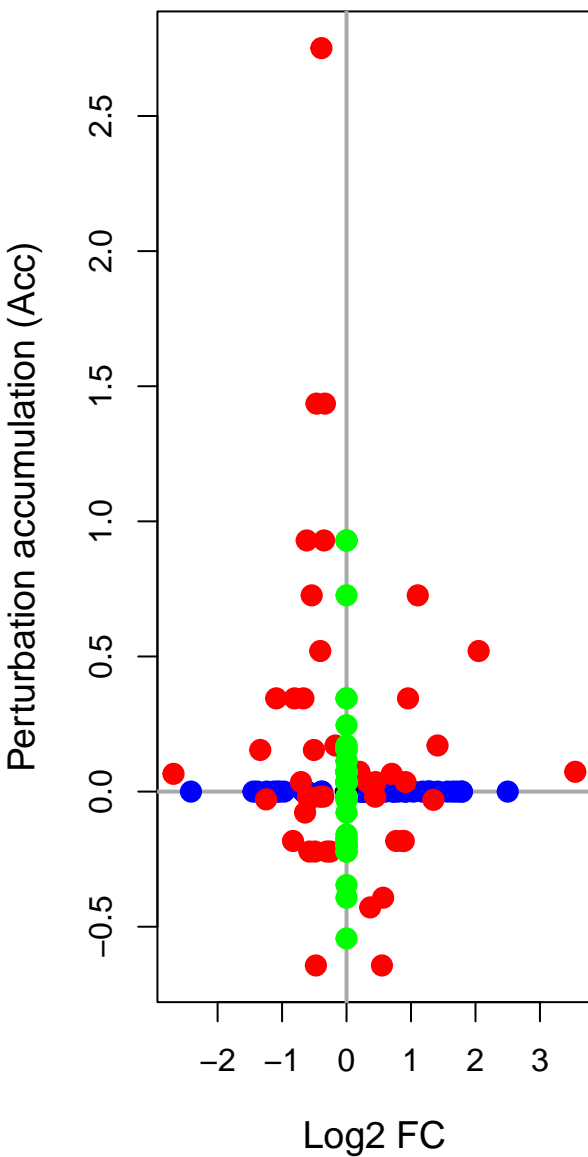
pathway ID=04744



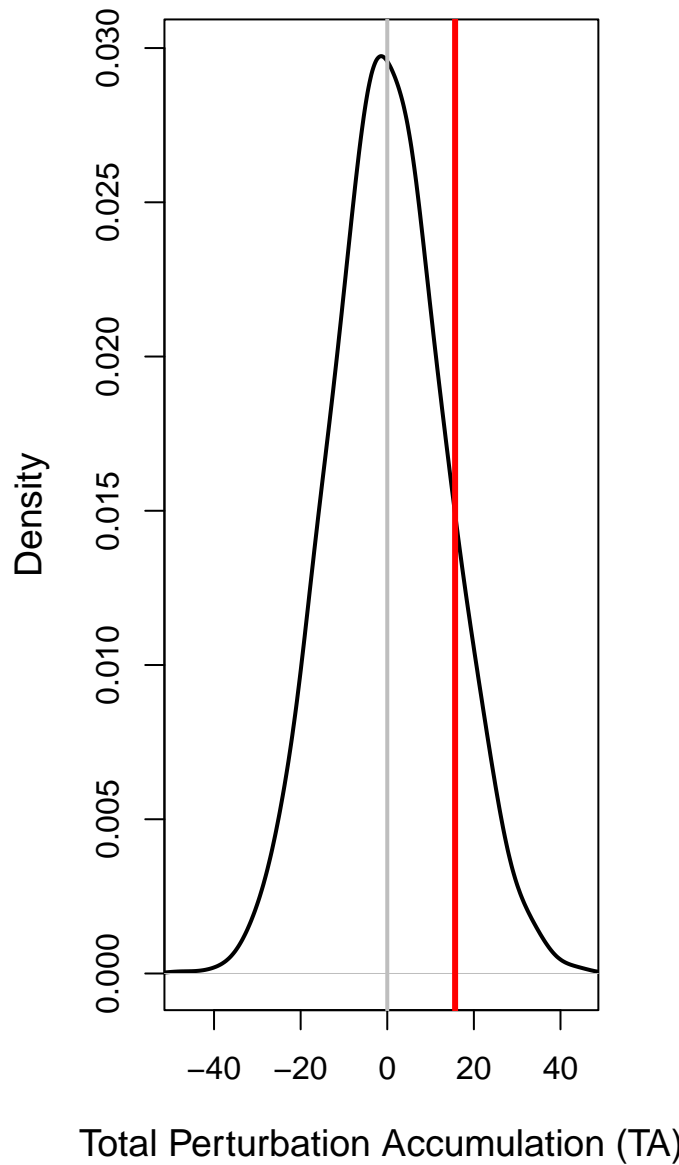
pathway ID=04744 P PERT=1



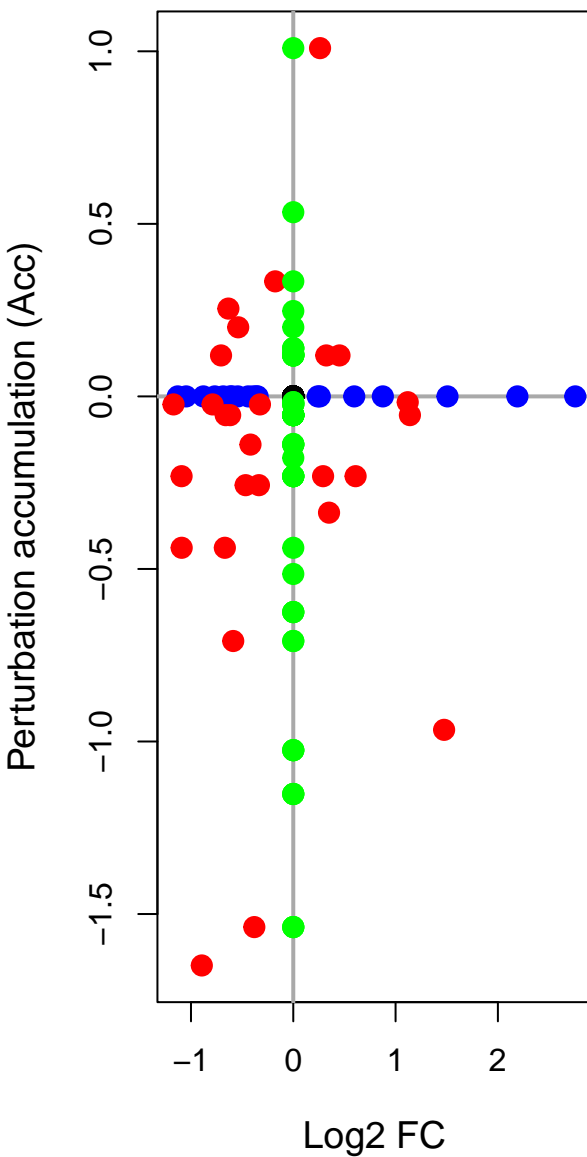
pathway ID=04810



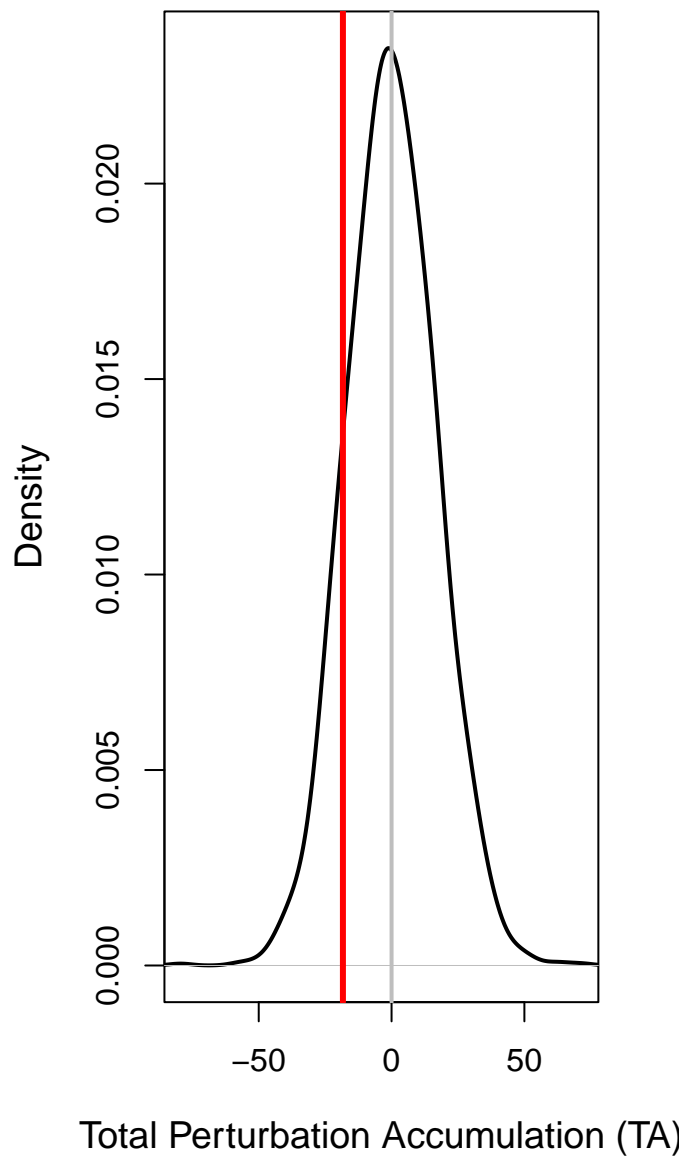
pathway ID=04810 P PERT=0.248



pathway ID=04910

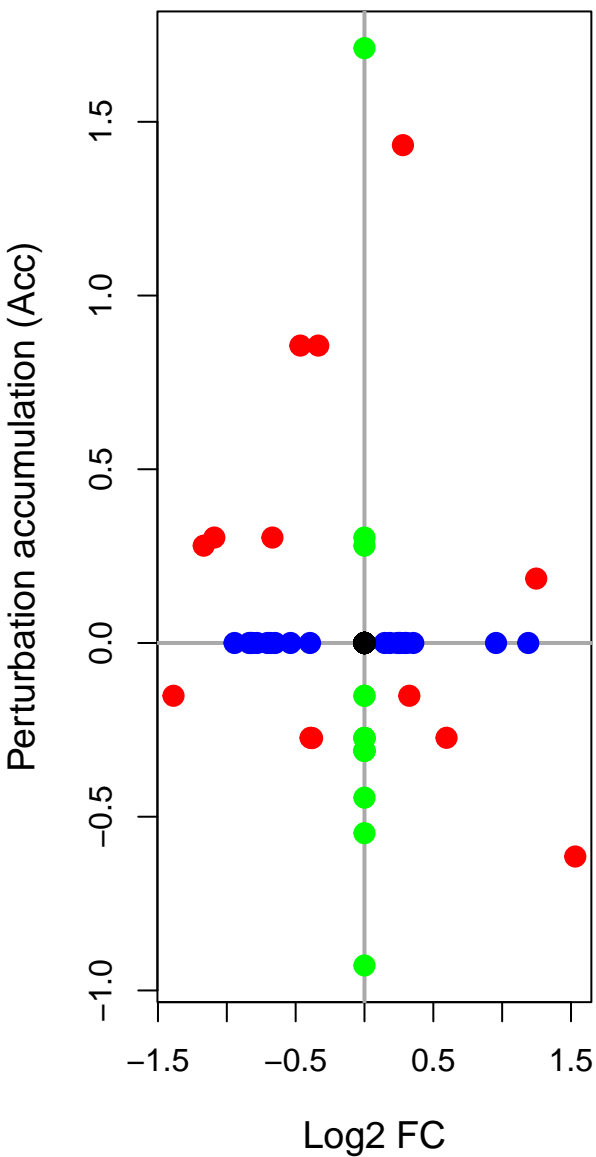


pathway ID=04910 P PERT=0.272

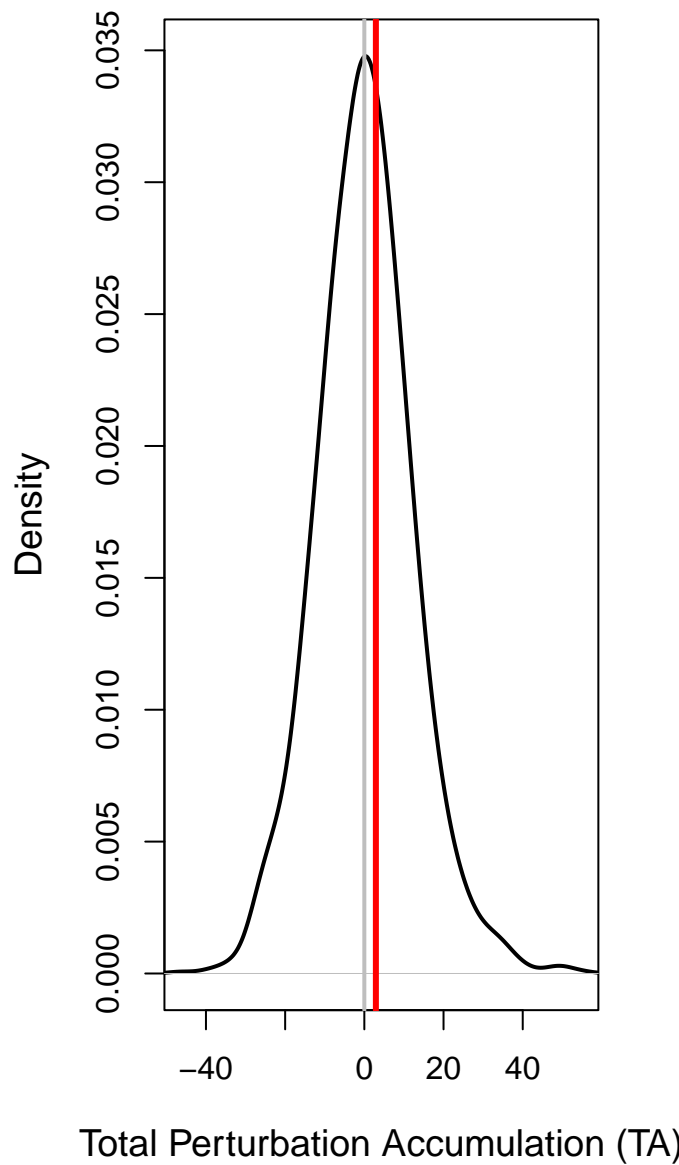




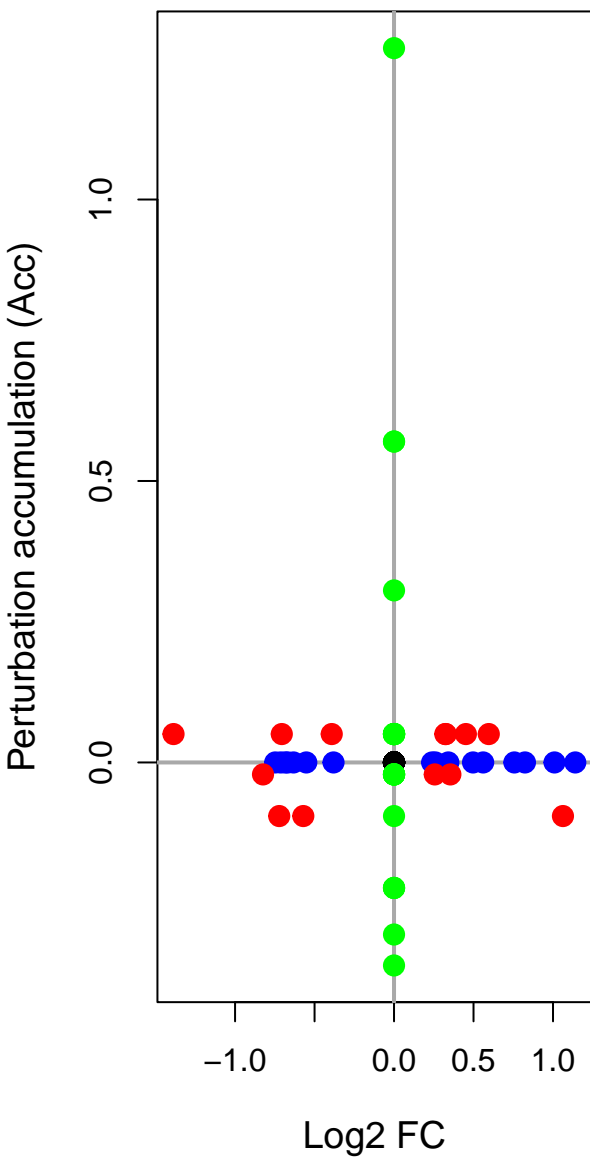
pathway ID=04912



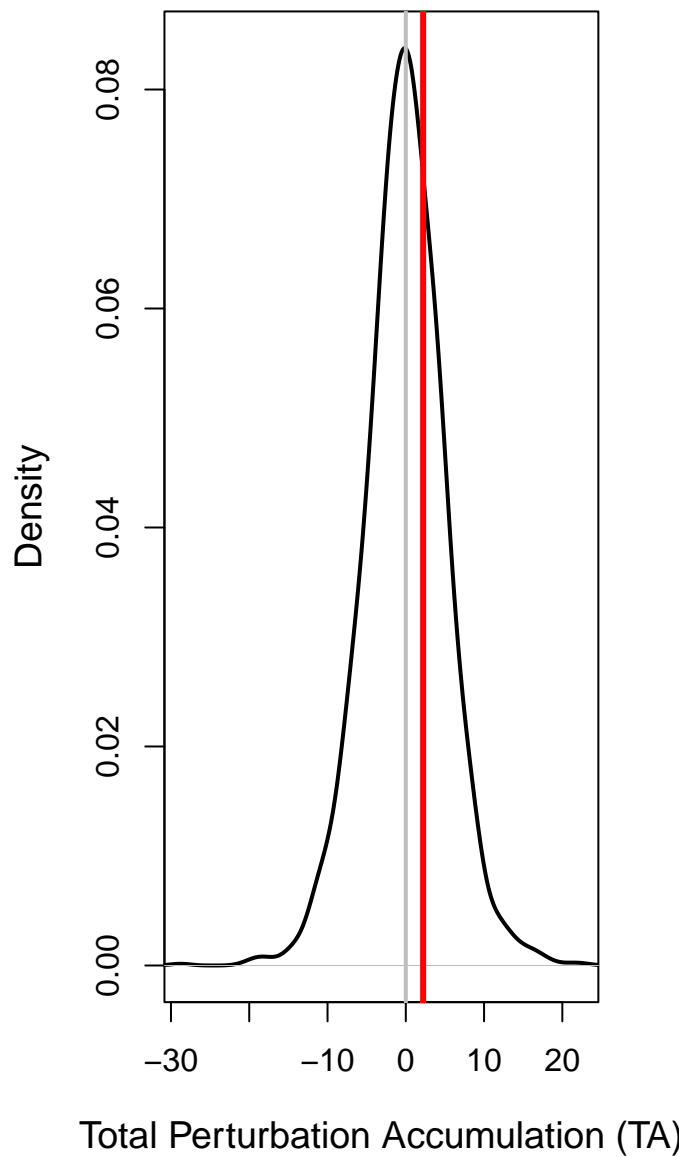
pathway ID=04912 P PERT=0.794



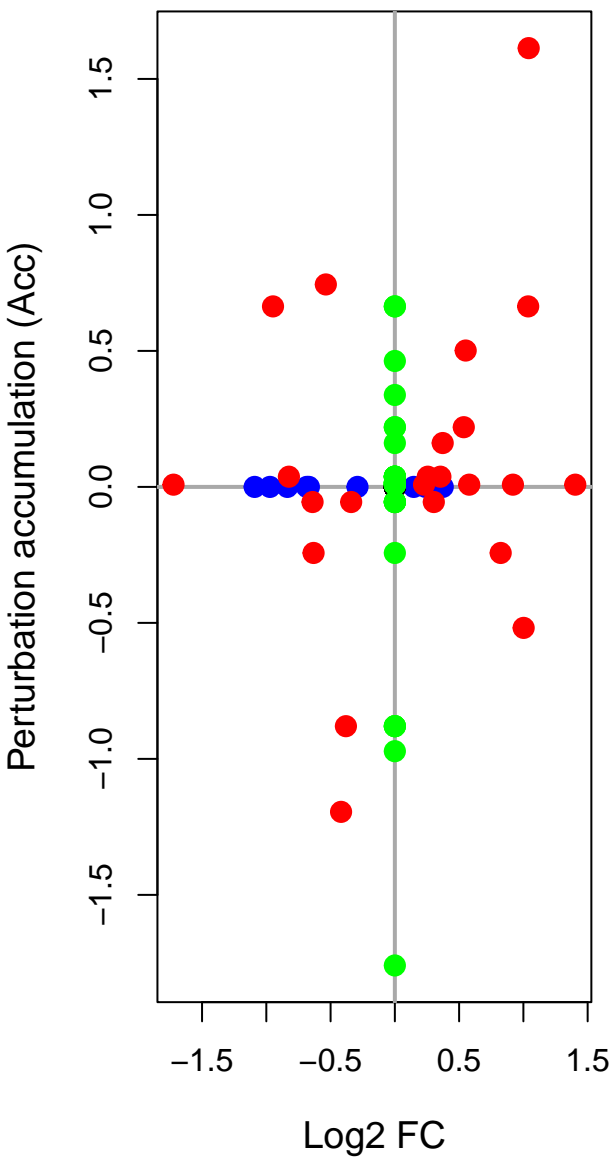
pathway ID=04914



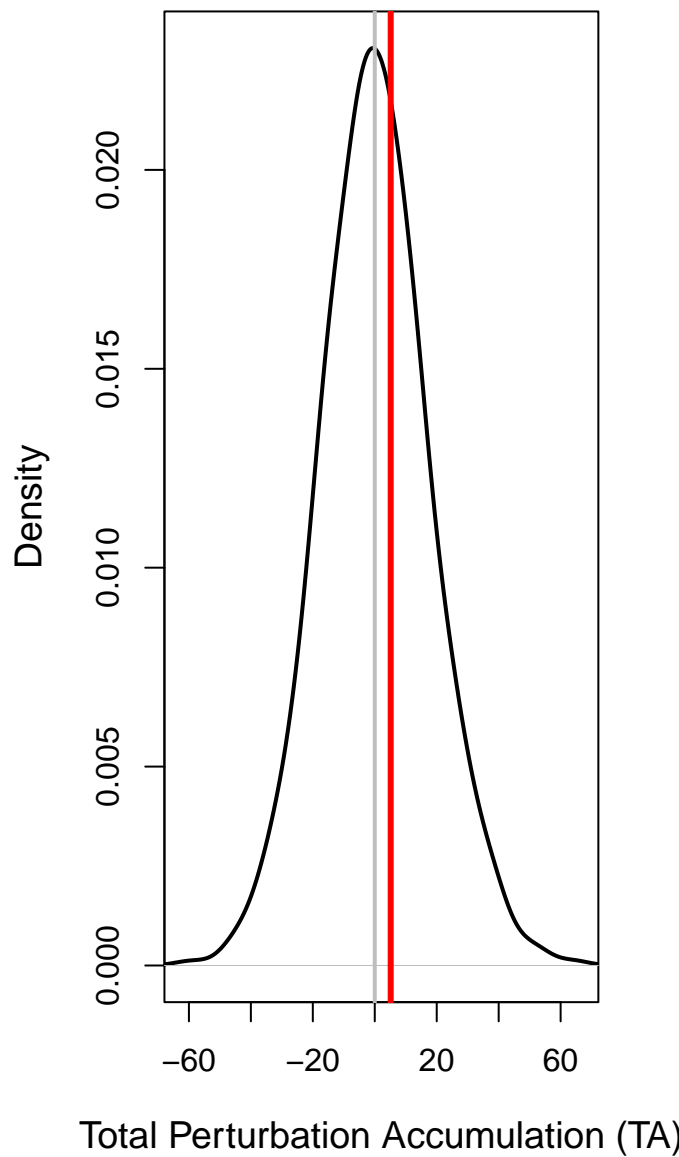
pathway ID=04914 P PERT=0.626



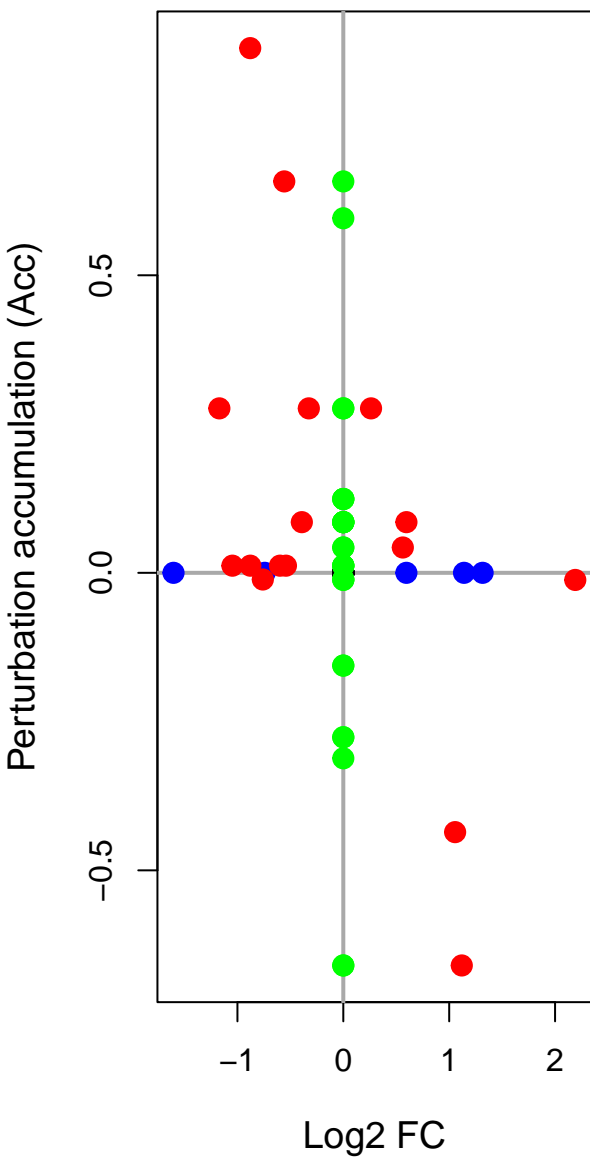
pathway ID=04916



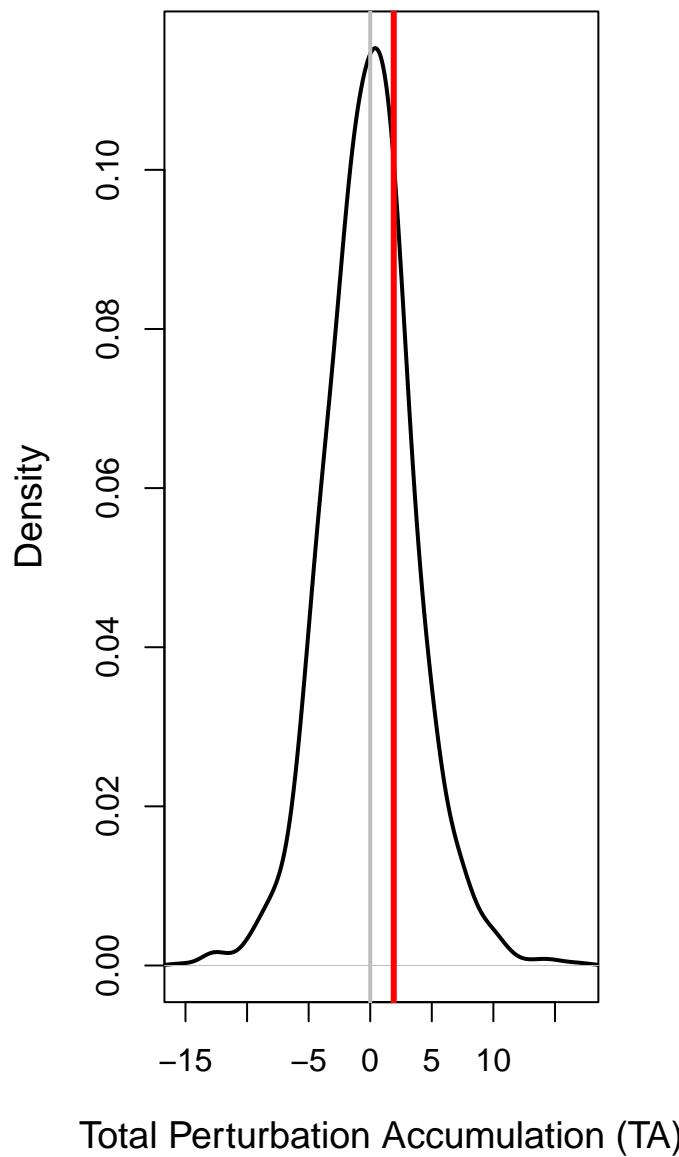
pathway ID=04916 P PERT=0.749



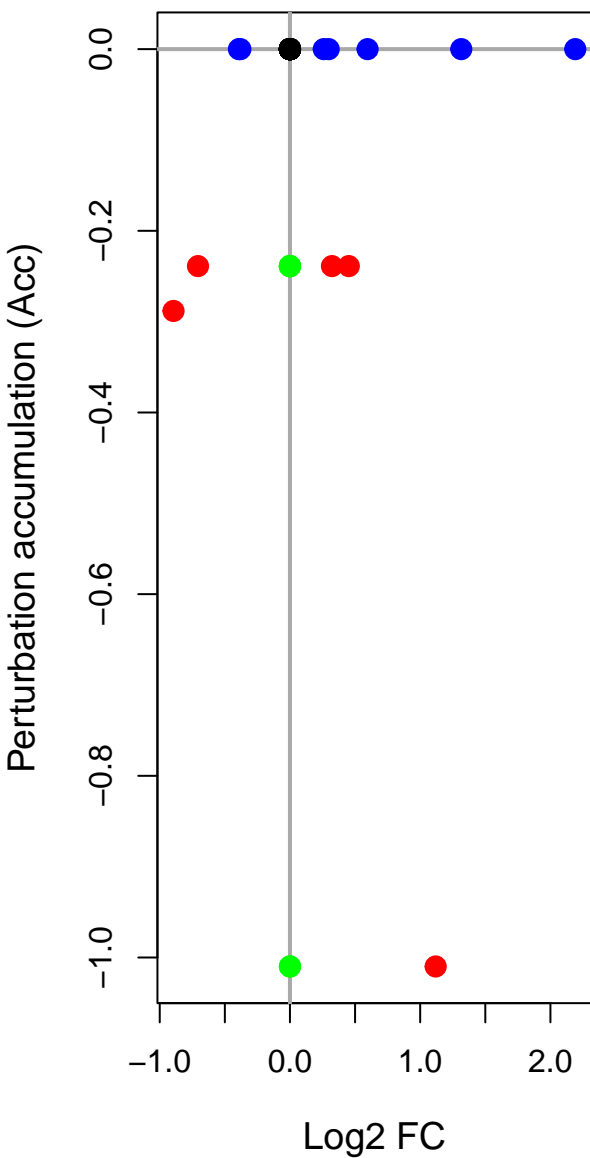
pathway ID=04920



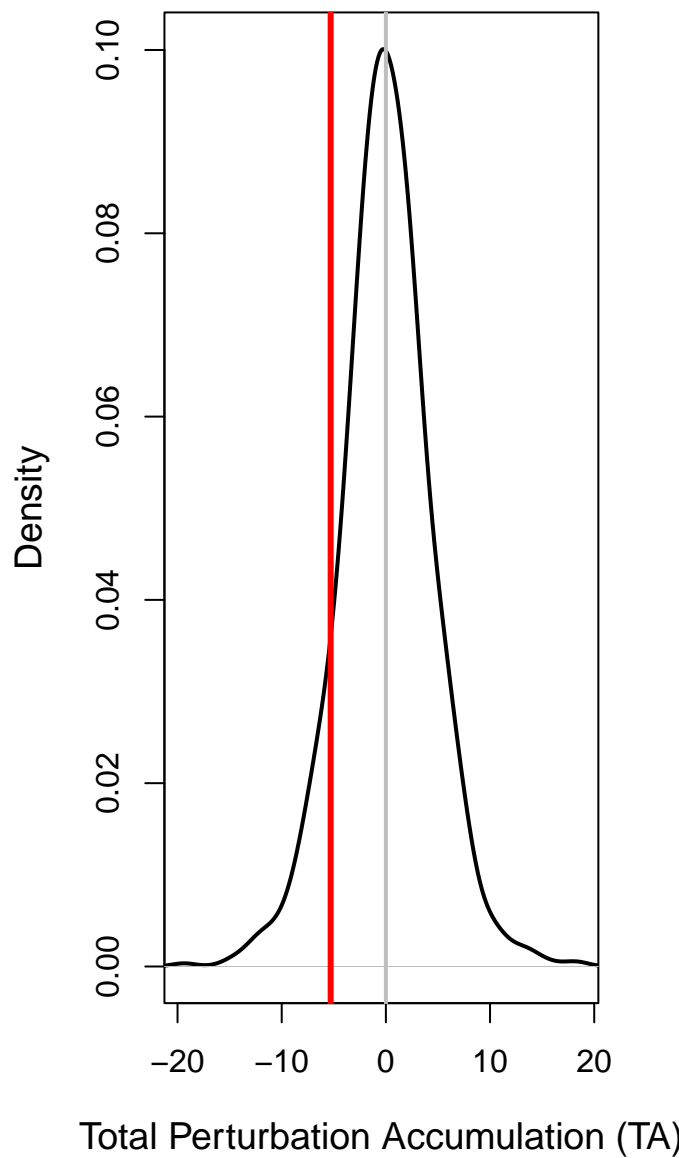
pathway ID=04920 P PERT=0.541



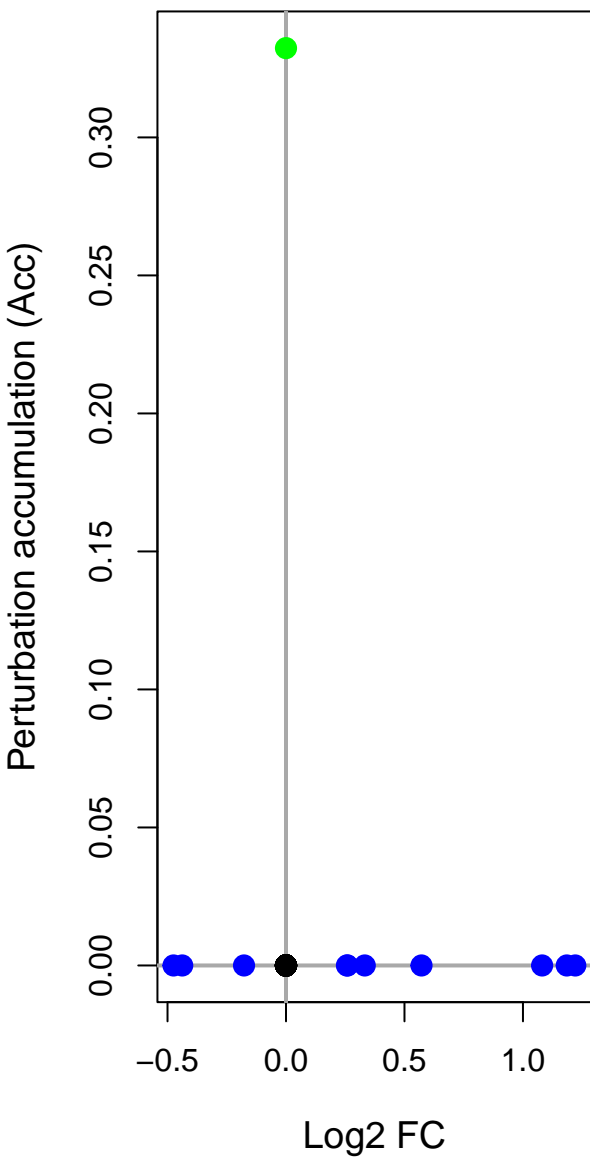
pathway ID=04930



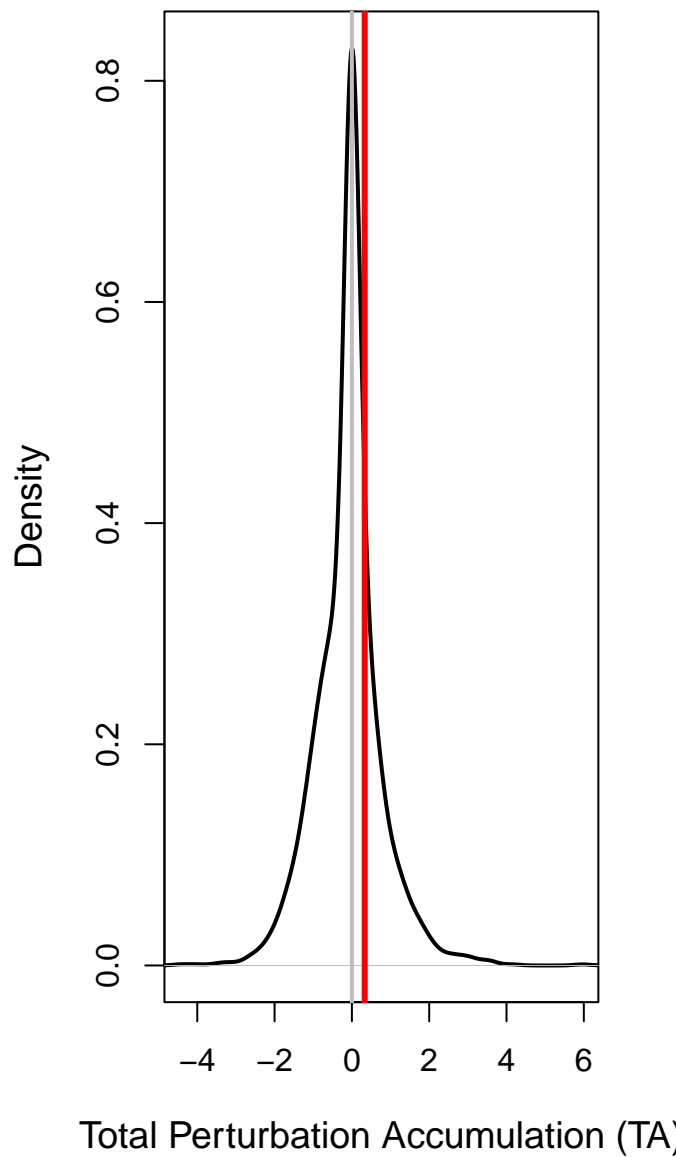
pathway ID=04930 P PERT=0.203



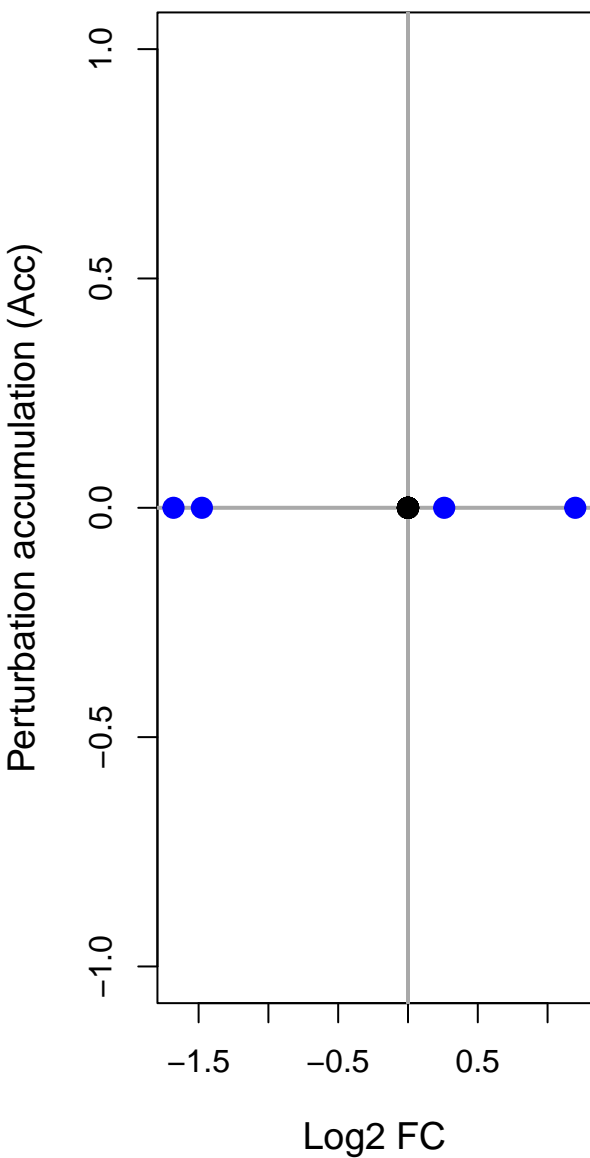
pathway ID=04940



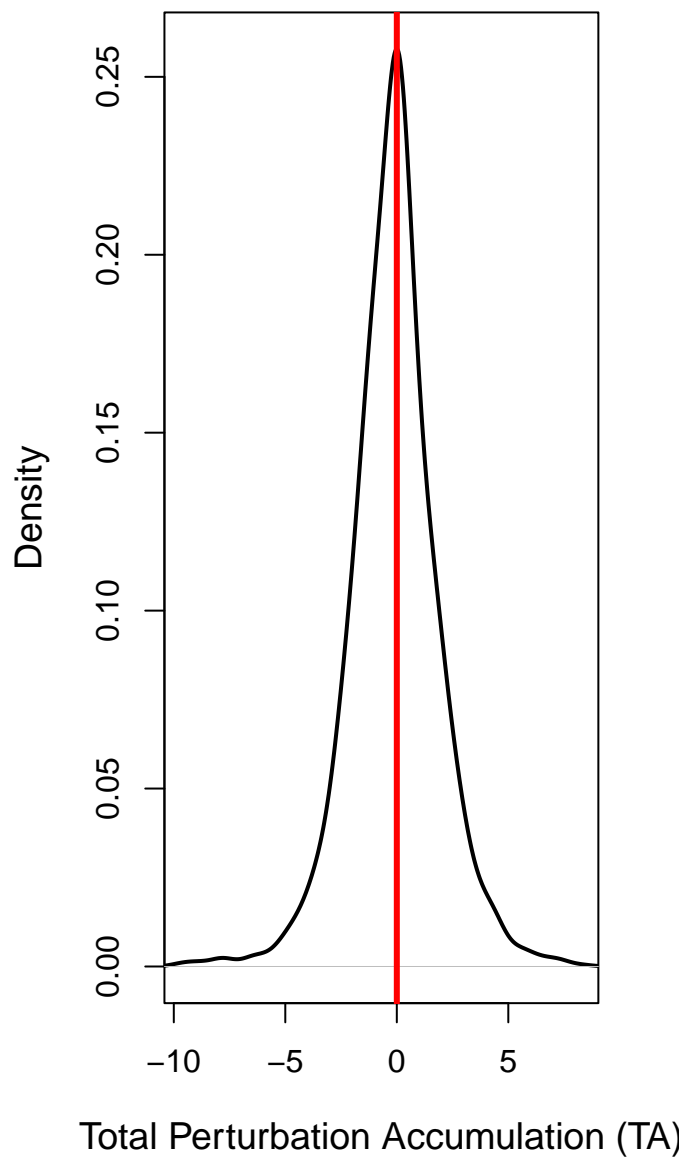
pathway ID=04940 P PERT=0.443



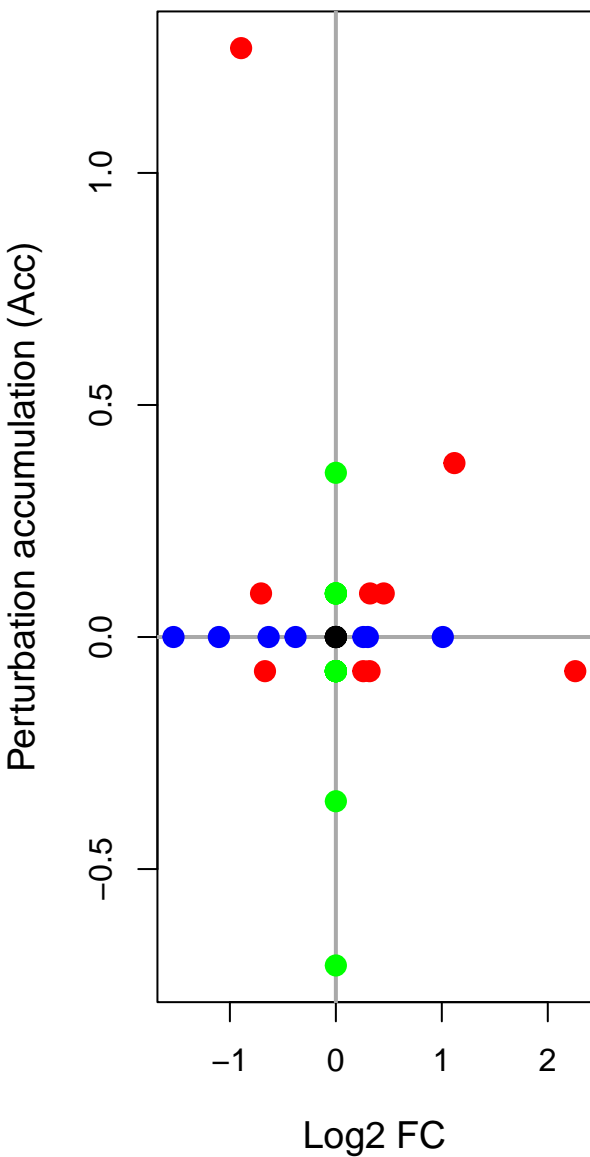
pathway ID=04950



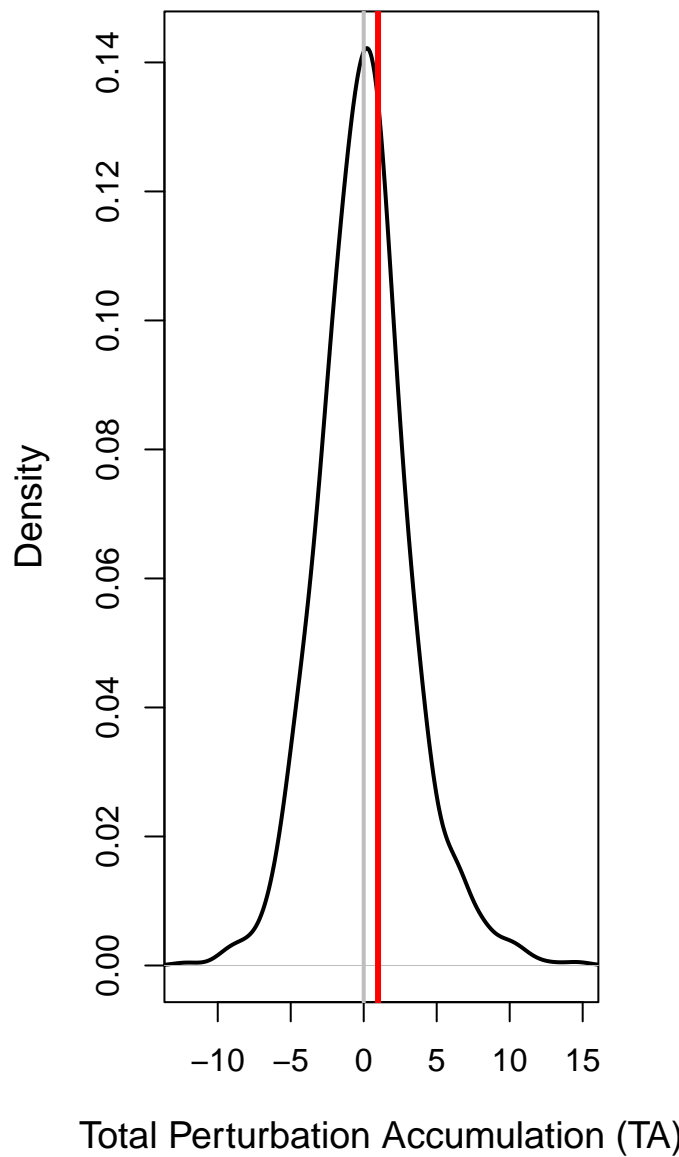
pathway ID=04950 P PERT=1



pathway ID=04960

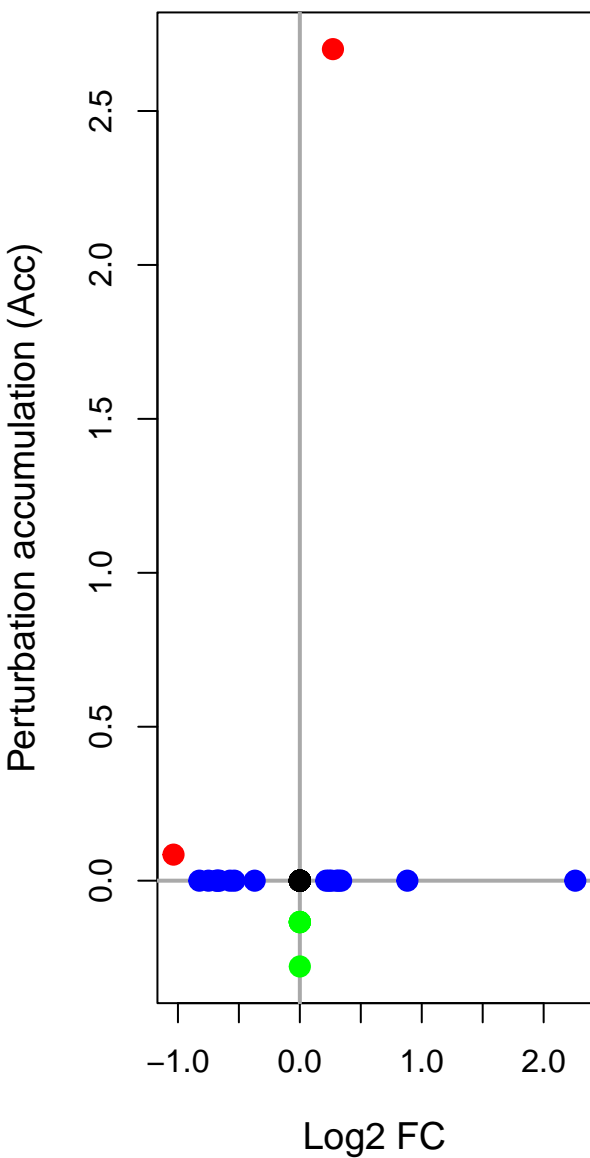


pathway ID=04960 P PERT=0.698

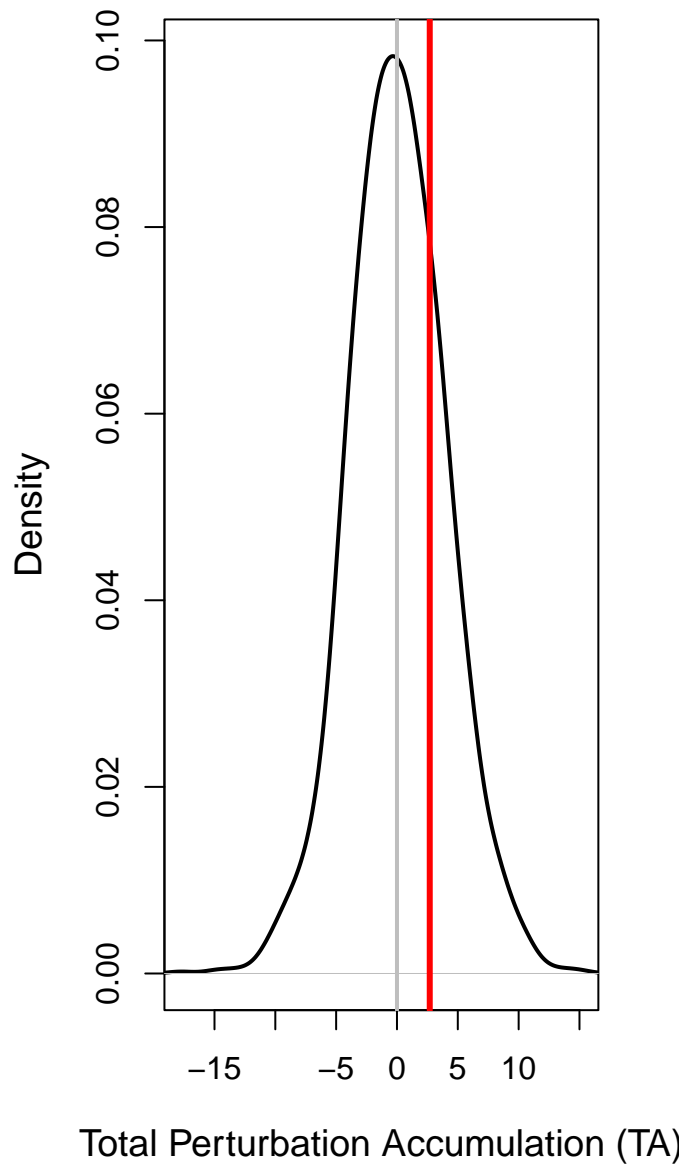




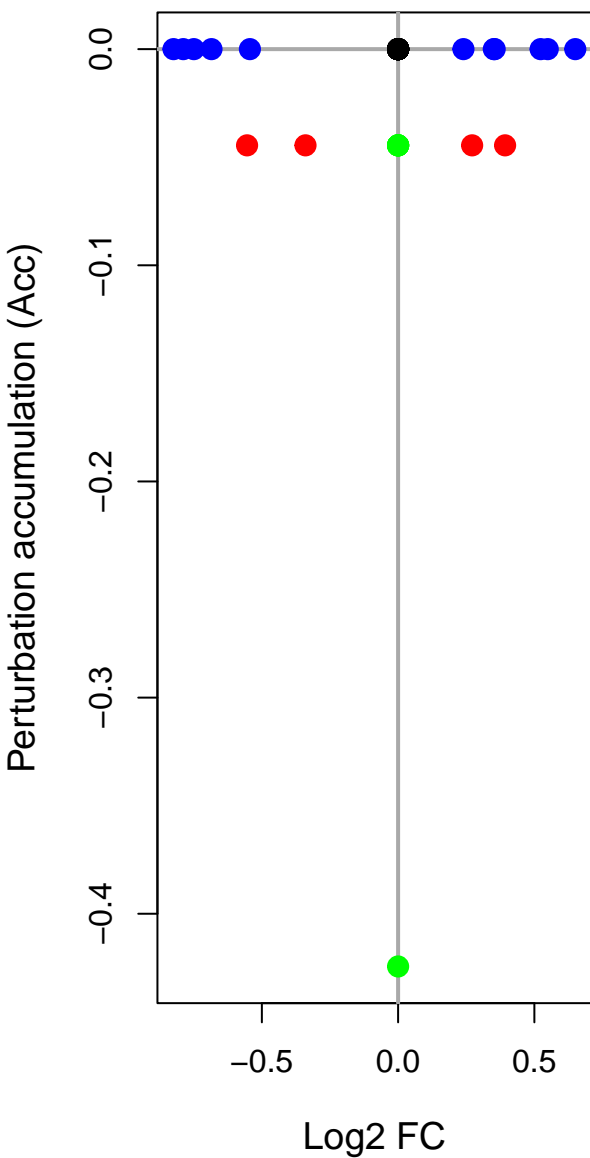
pathway ID=04961



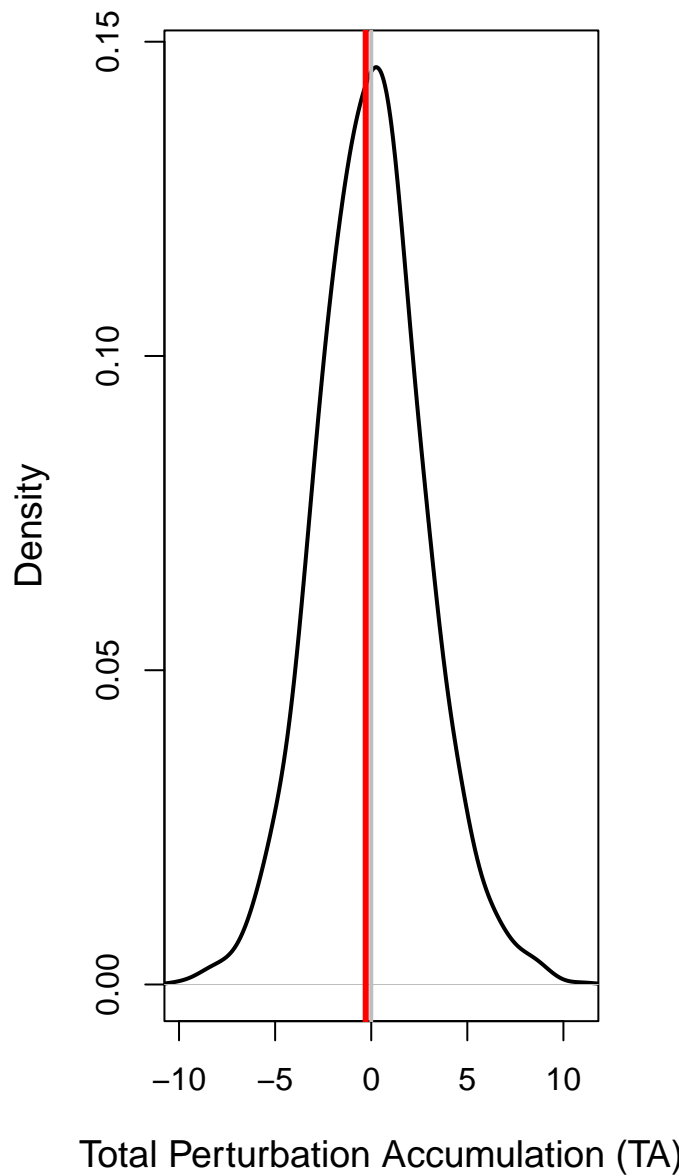
pathway ID=04961 P PERT=0.516



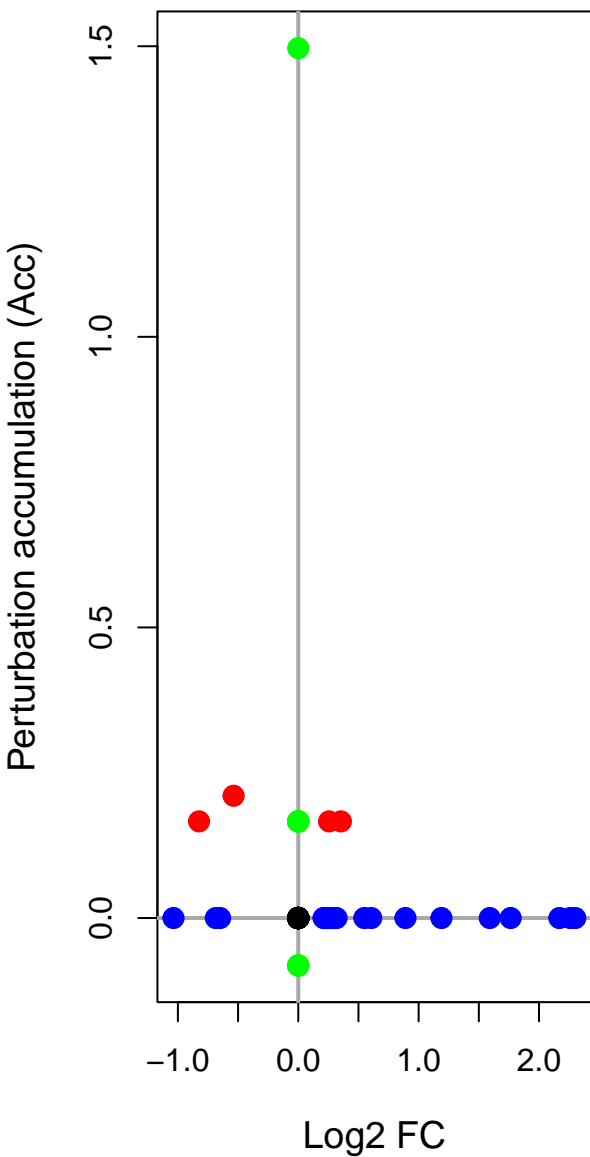
pathway ID=04962



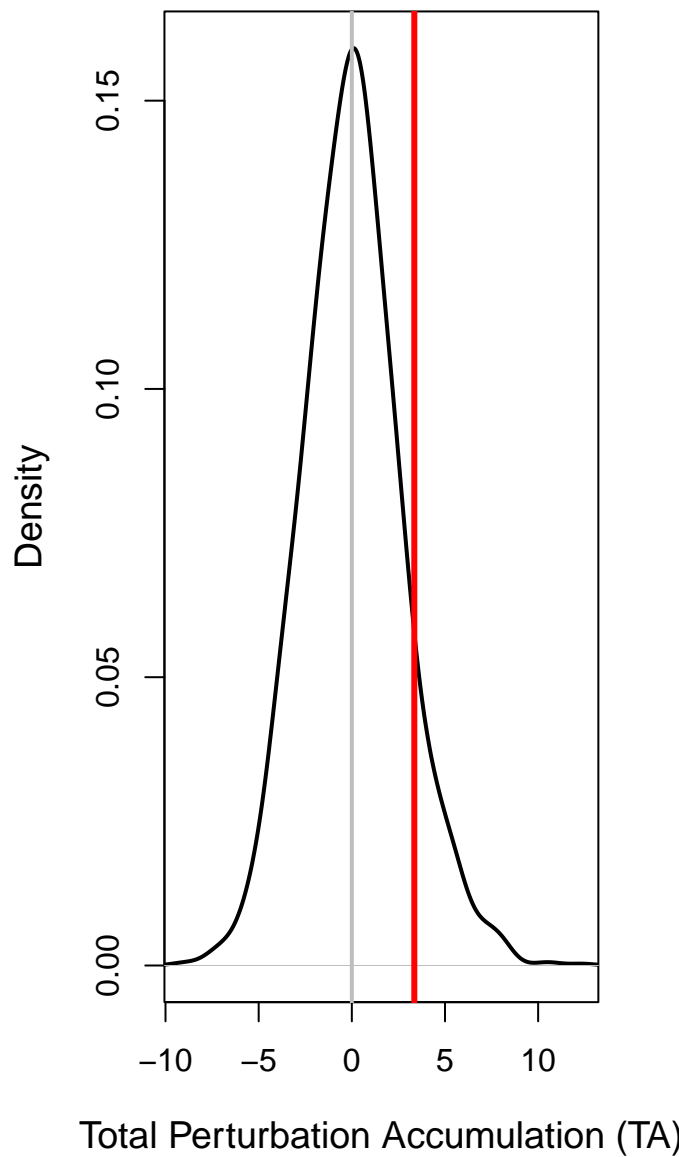
pathway ID=04962 P PERT=0.917



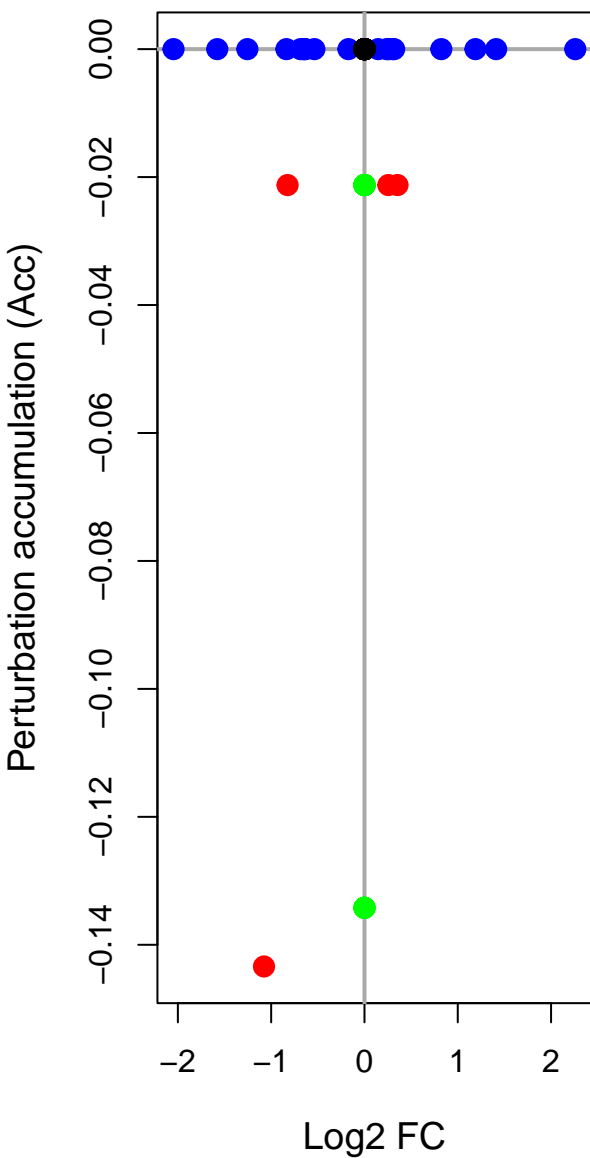
pathway ID=04970



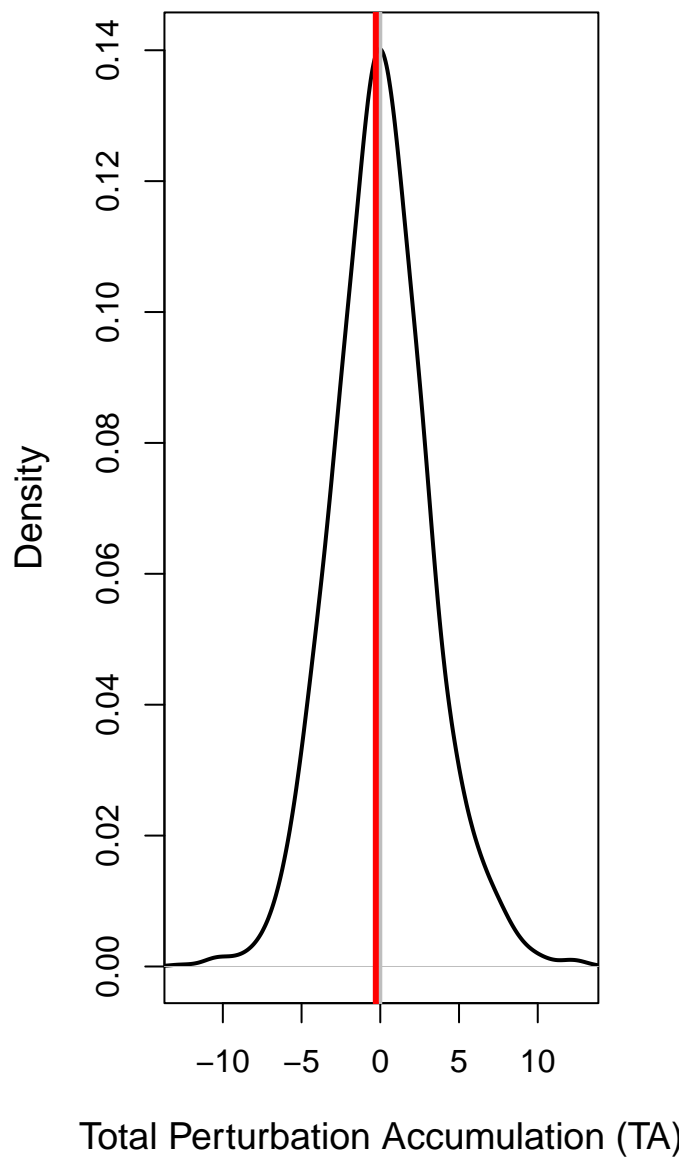
pathway ID=04970 P PERT=0.199



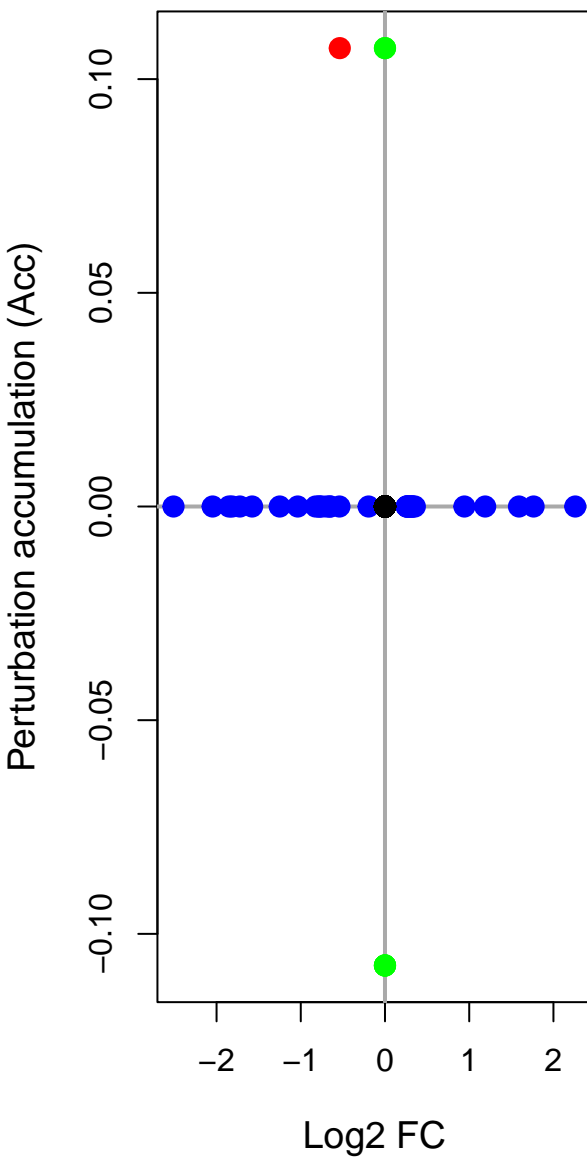
pathway ID=04971



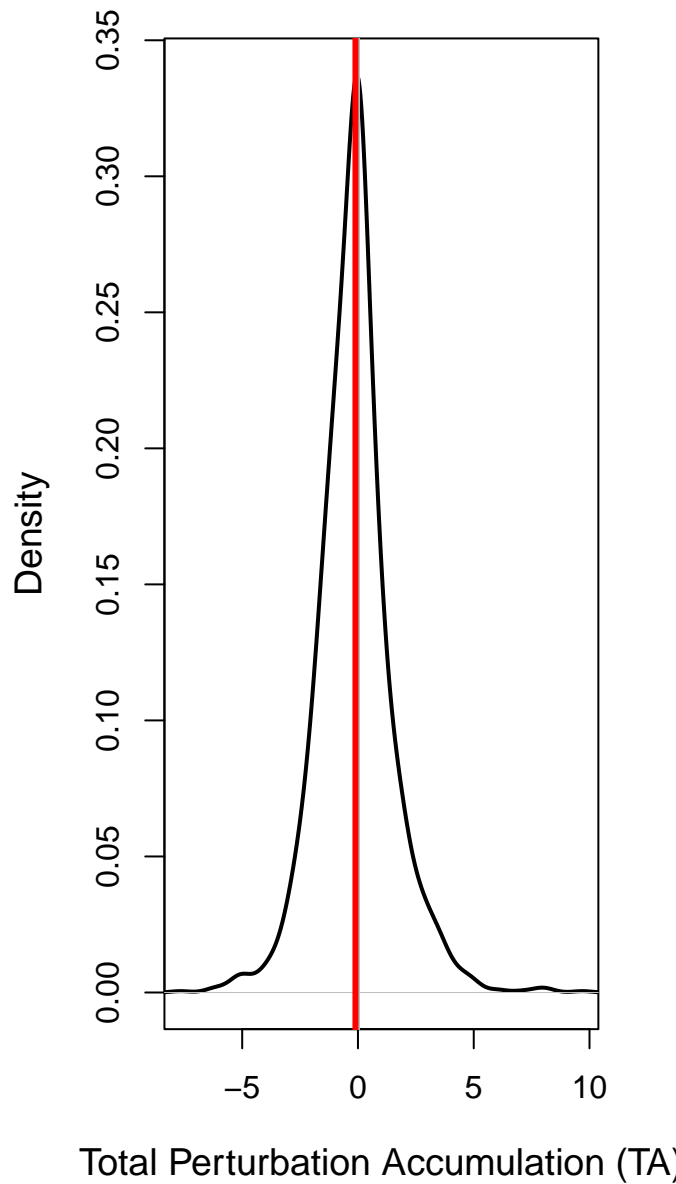
pathway ID=04971 P PERT=0.914



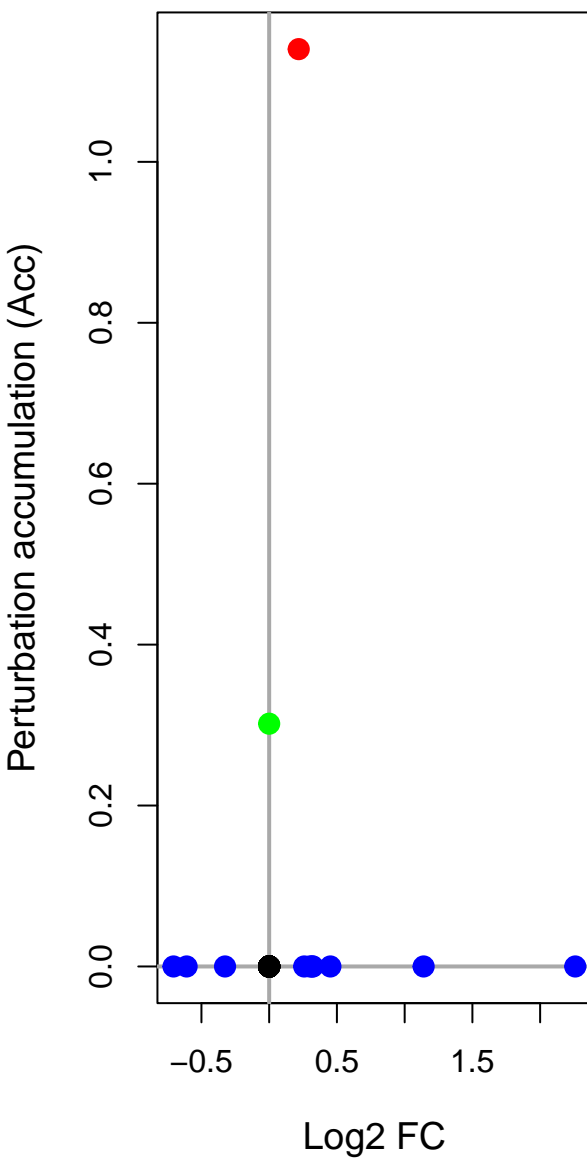
pathway ID=04972



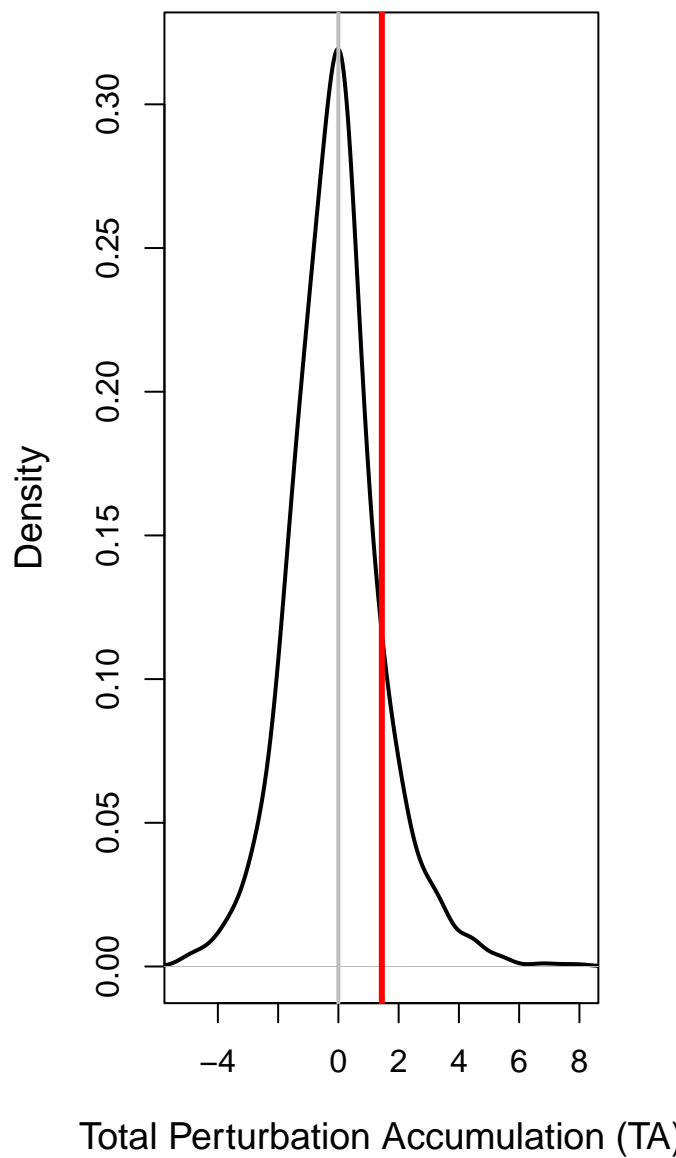
pathway ID=04972 P PERT=0.942



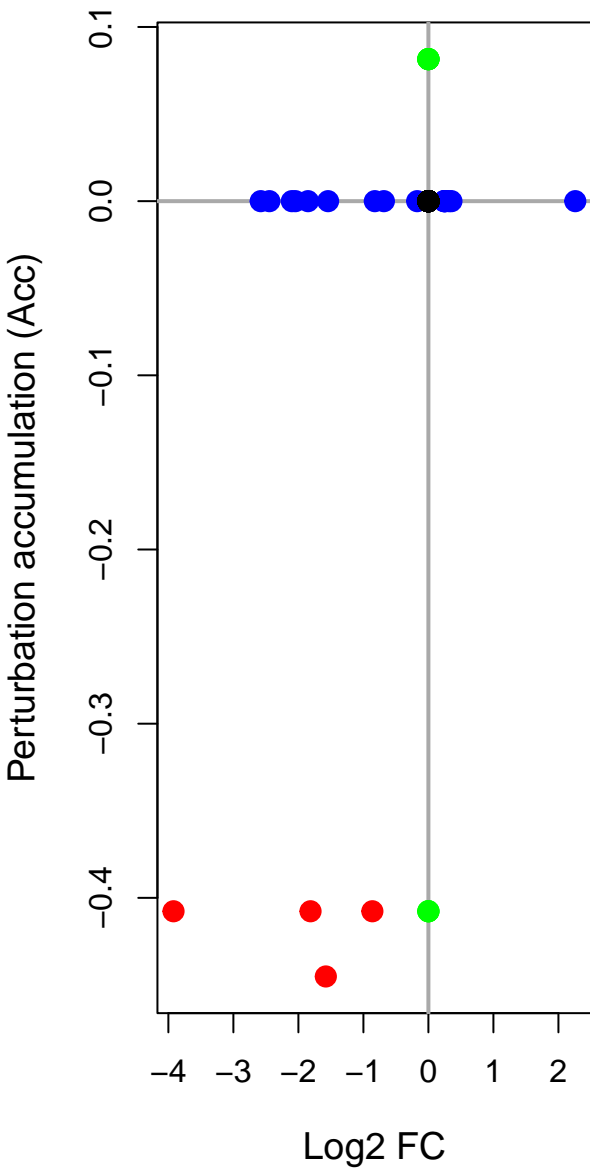
pathway ID=04973



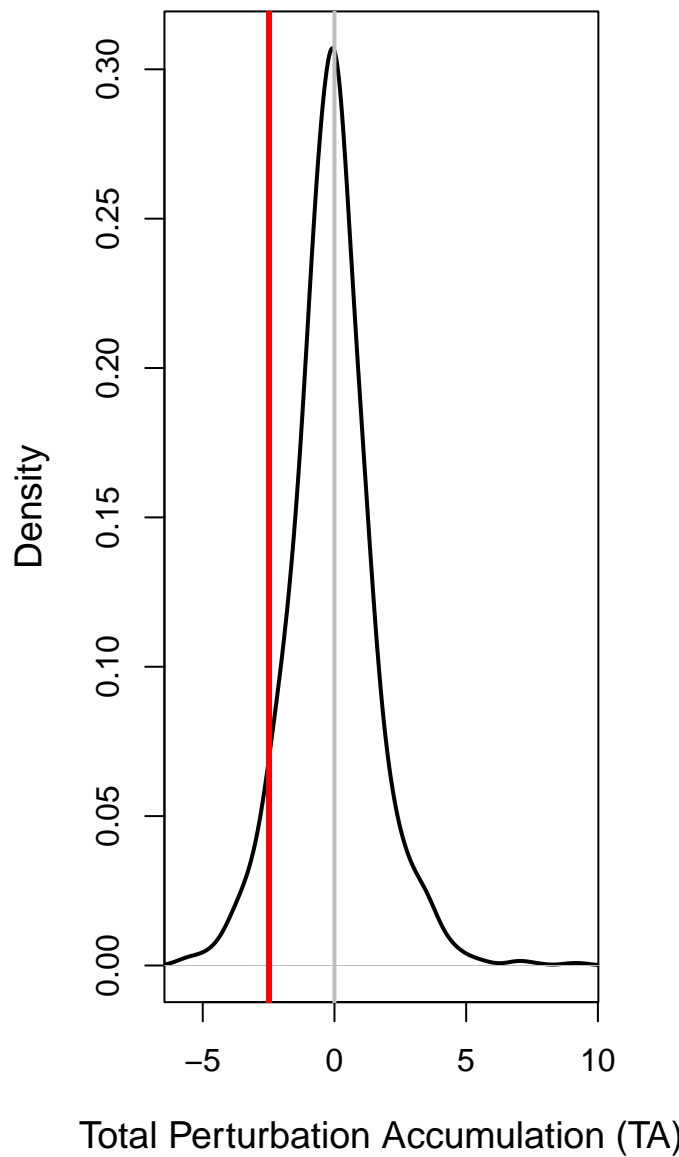
pathway ID=04973 P PERT=0.253



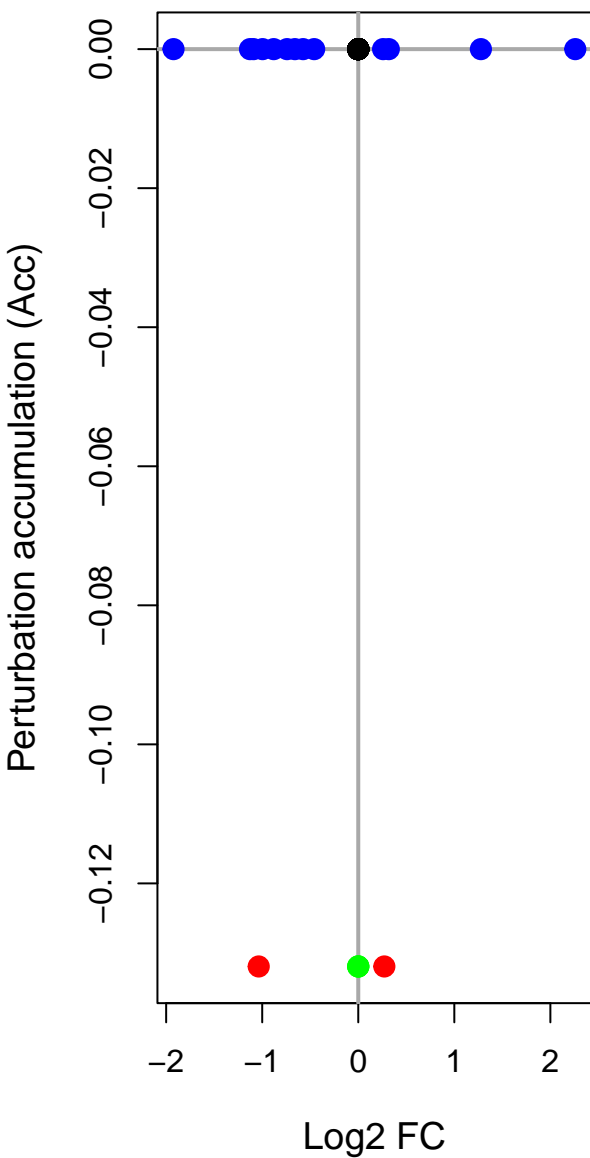
pathway ID=04976



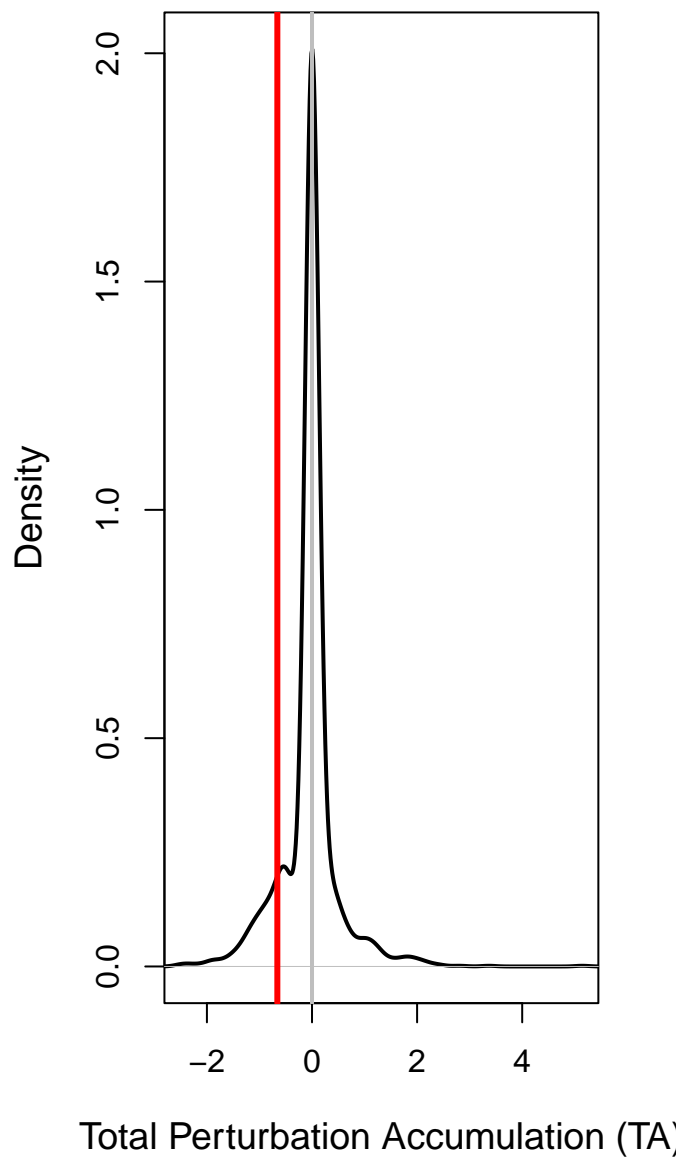
pathway ID=04976 P PERT=0.116



pathway ID=04978

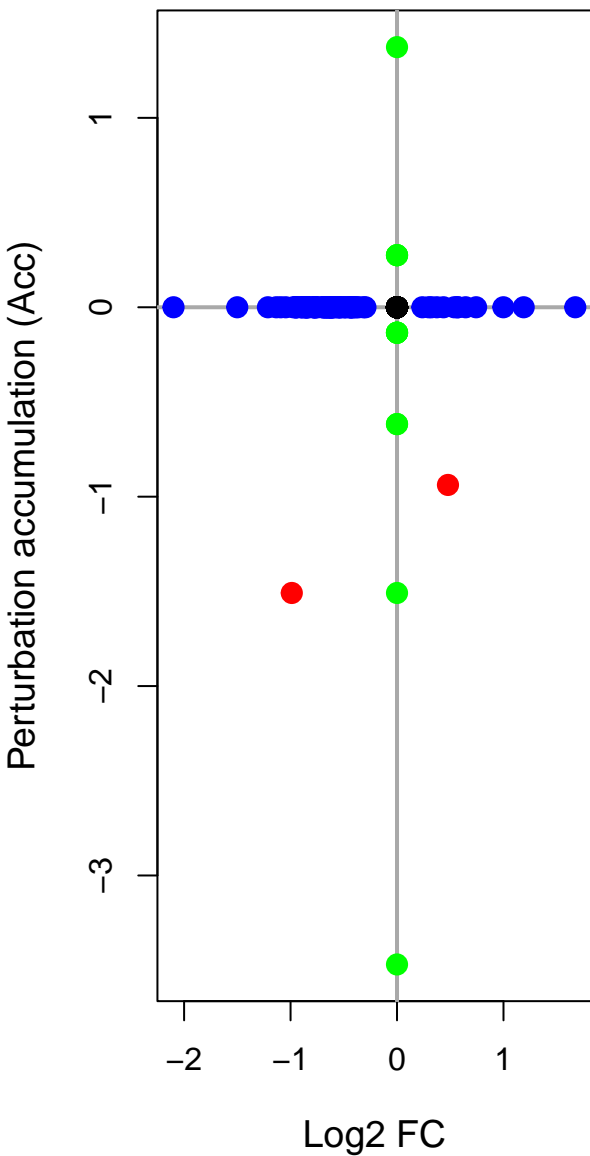


pathway ID=04978 P PERT=0.194

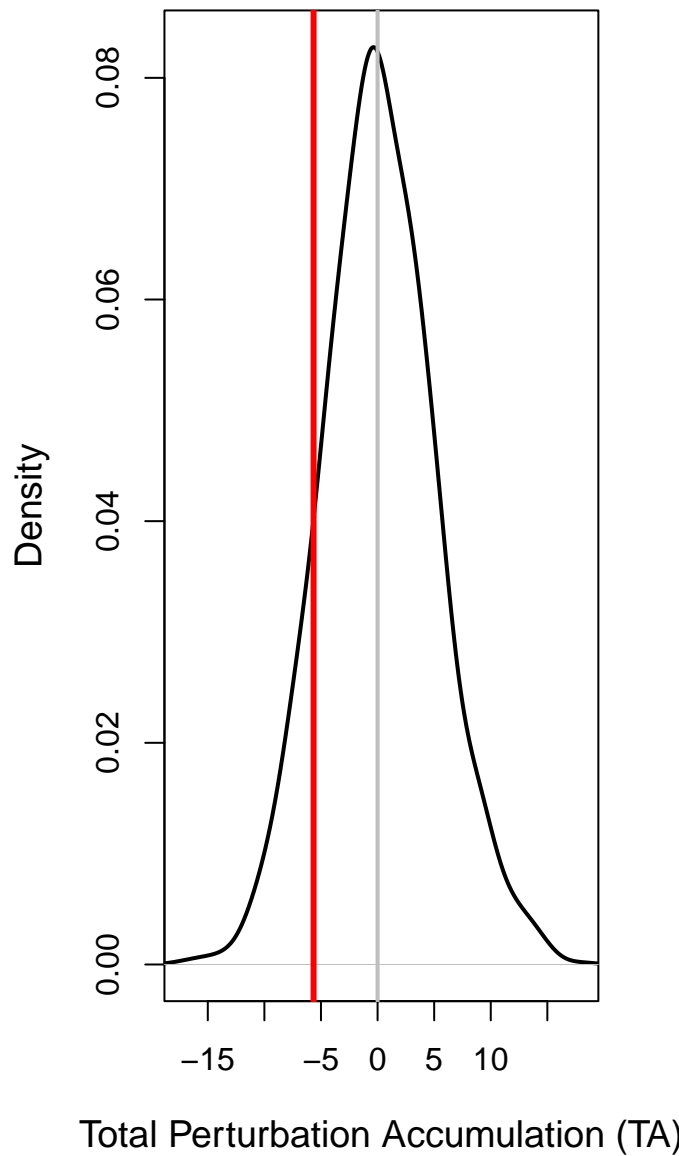




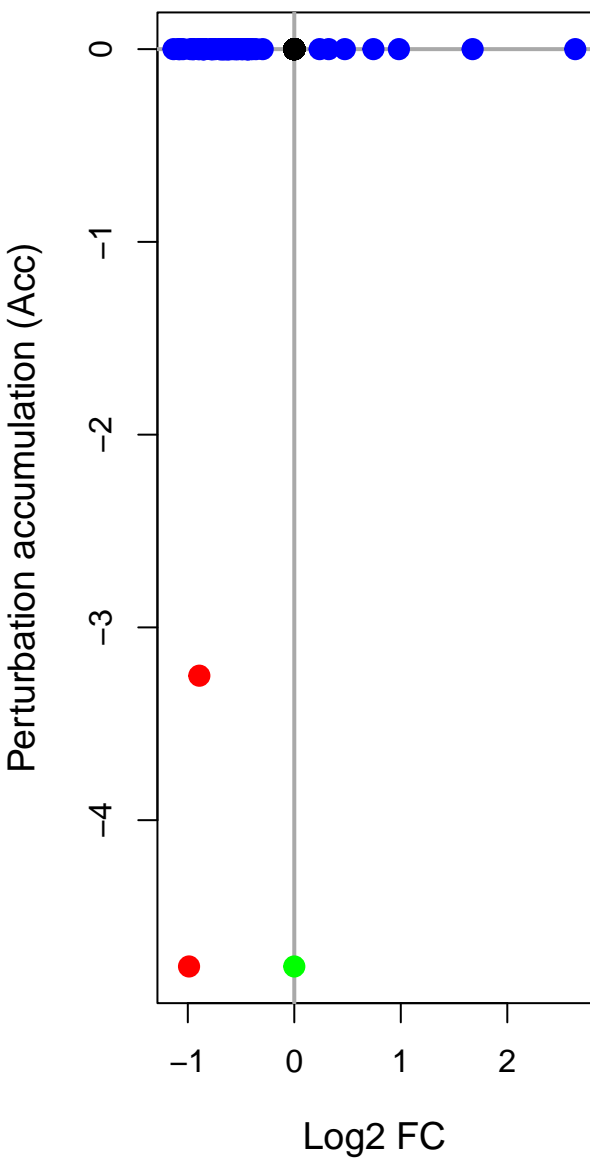
pathway ID=05010



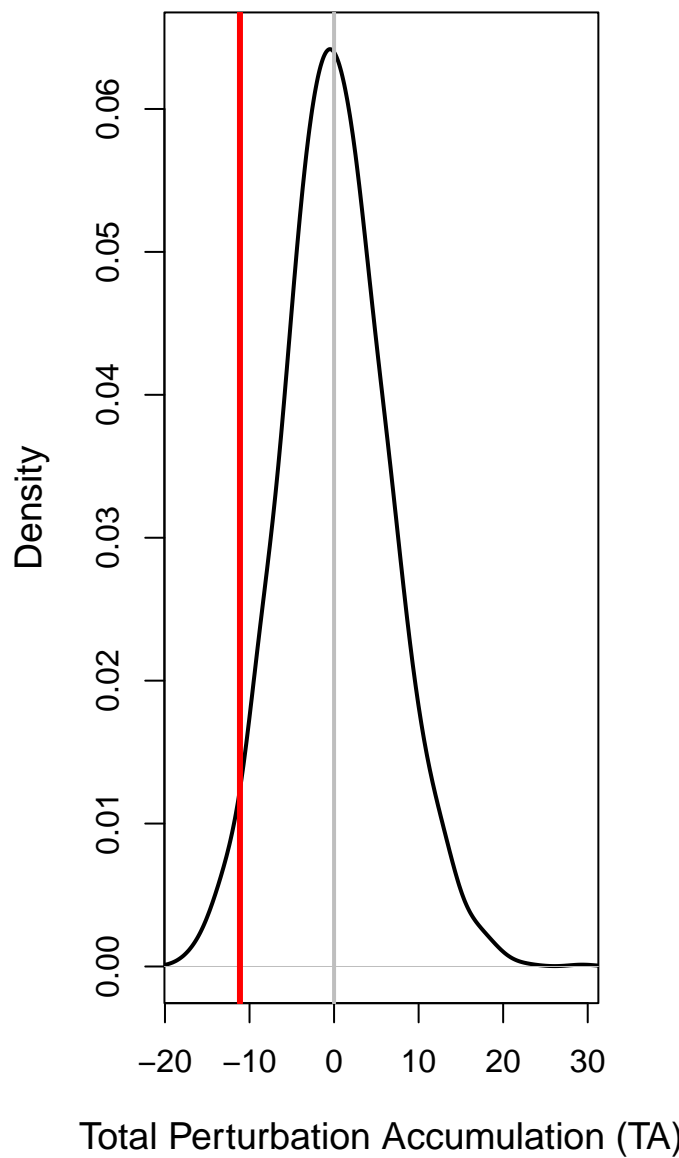
pathway ID=05010 P PERT=0.228



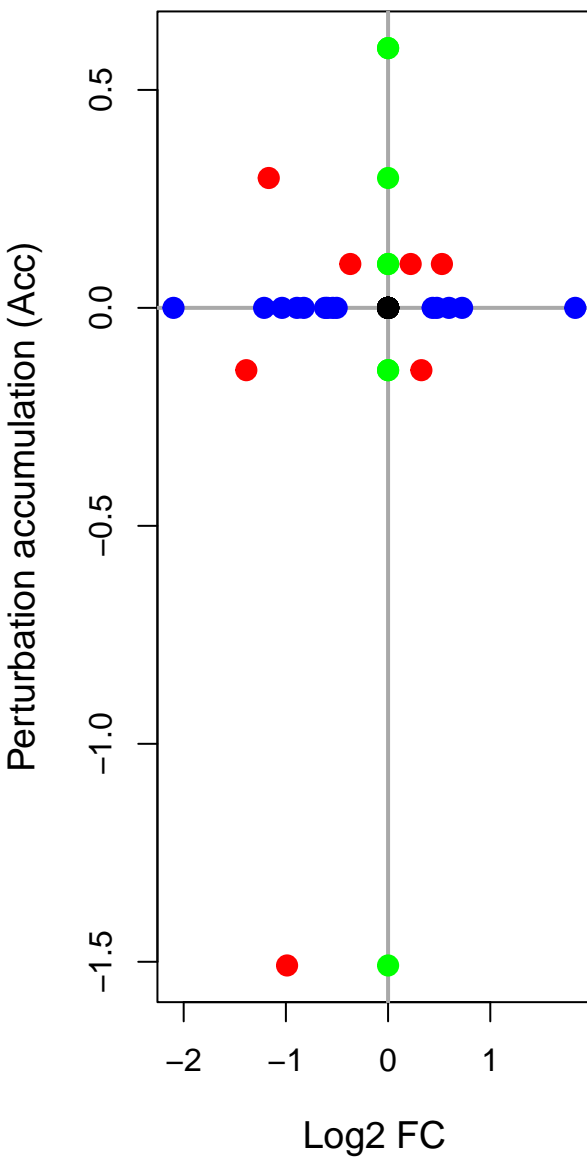
pathway ID=05012



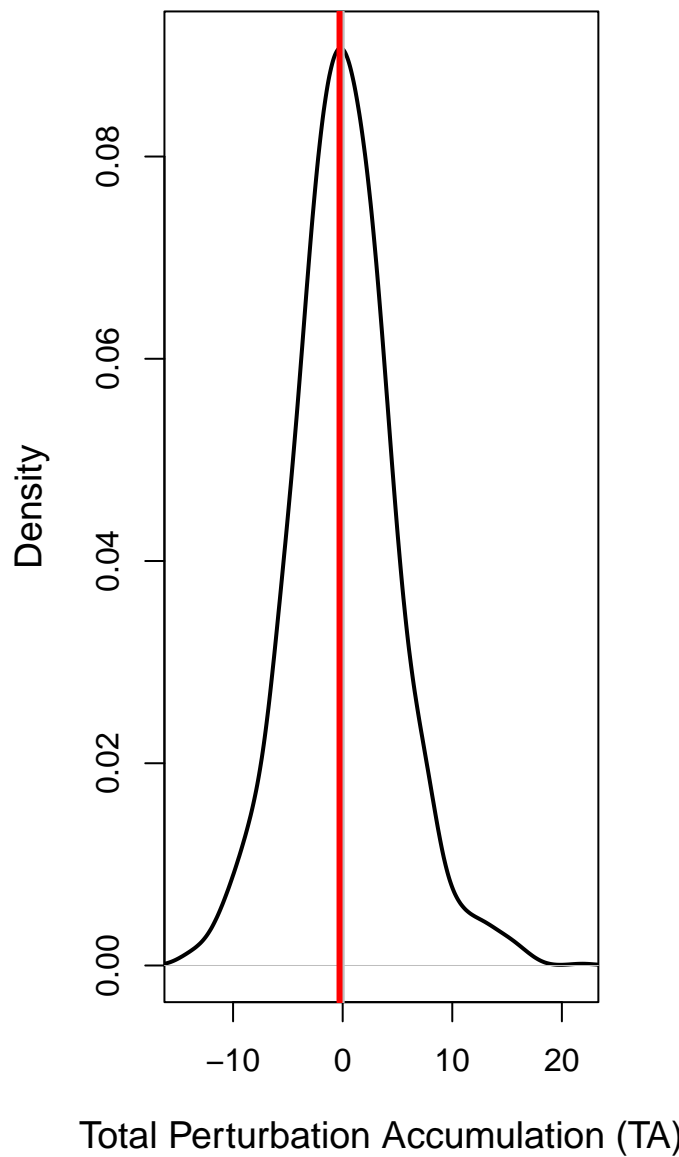
pathway ID=05012 P PERT=0.06



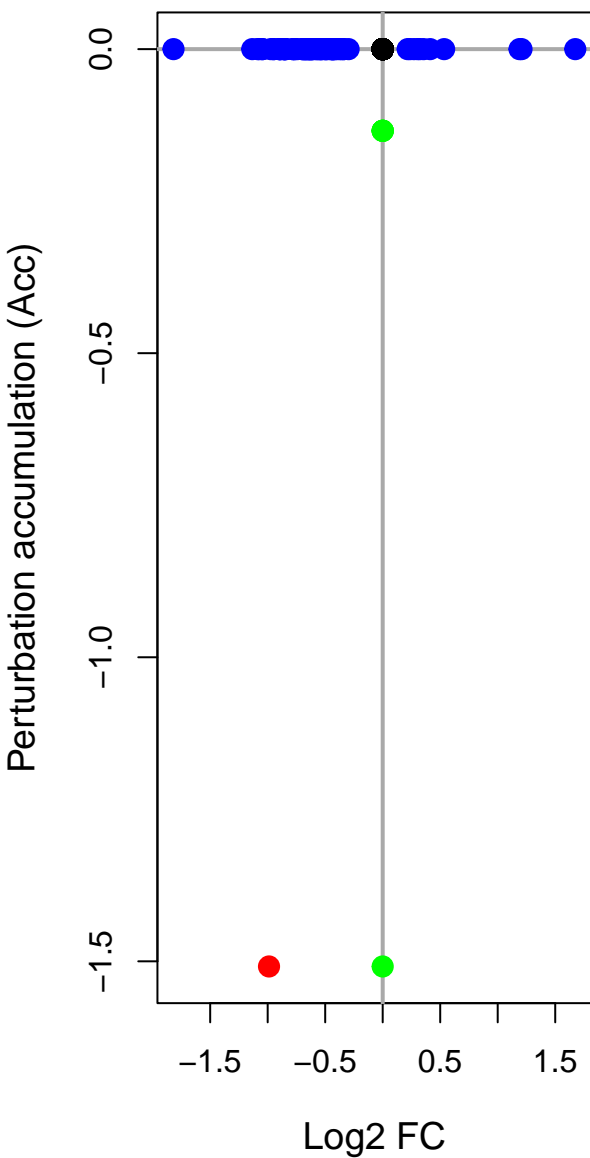
pathway ID=05014



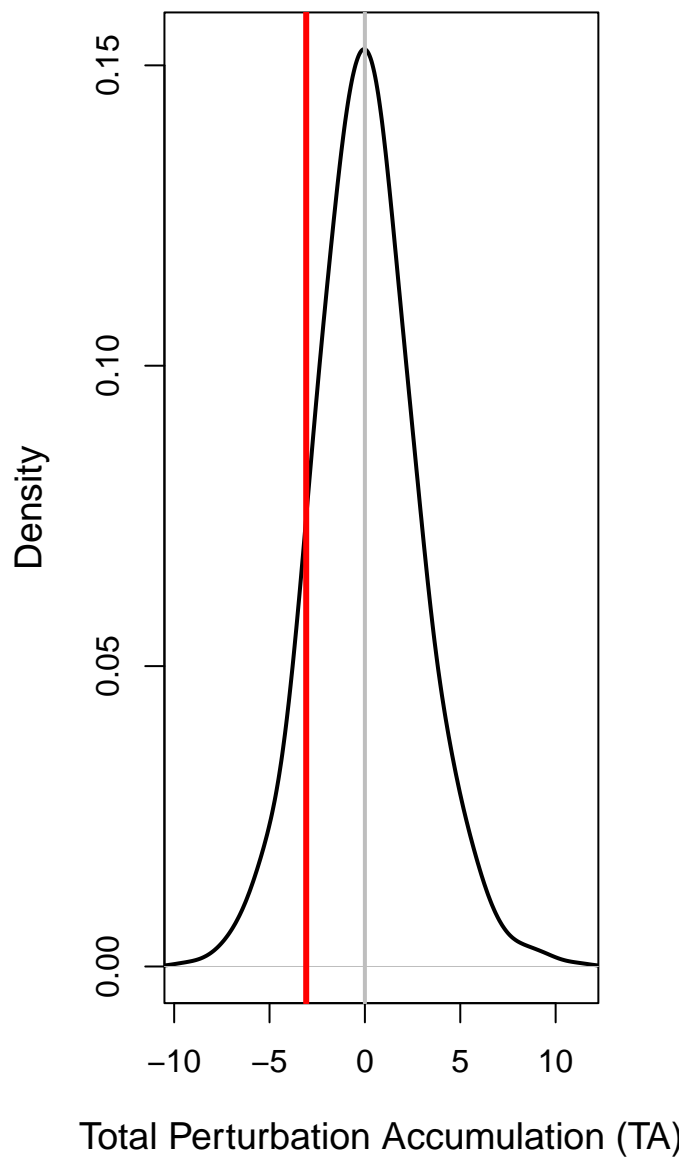
pathway ID=05014 P PERT=0.94



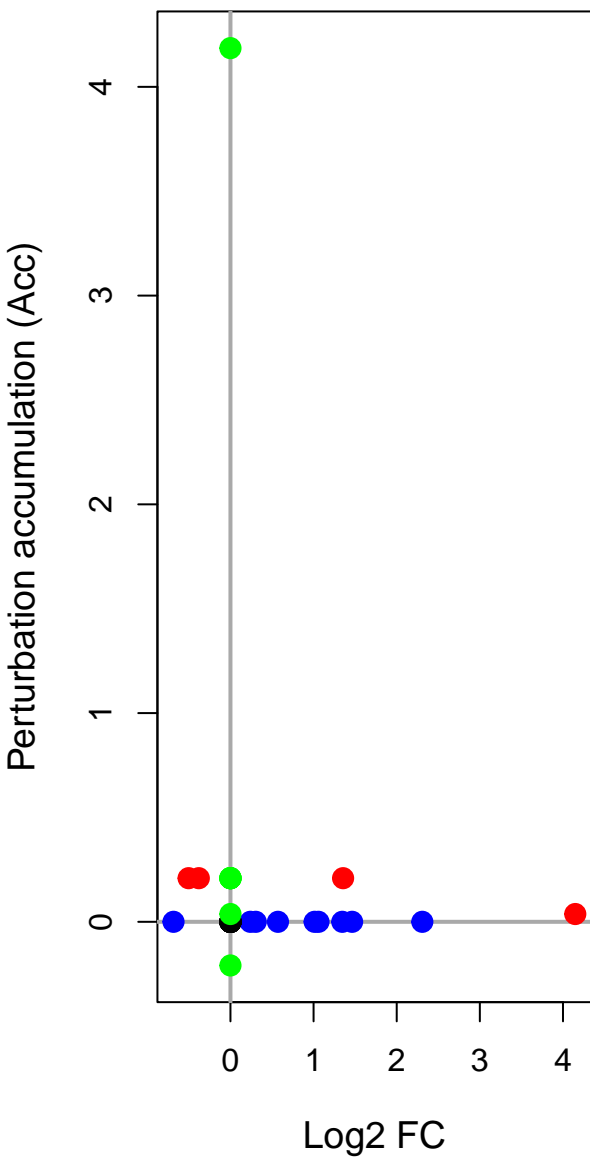
pathway ID=05016



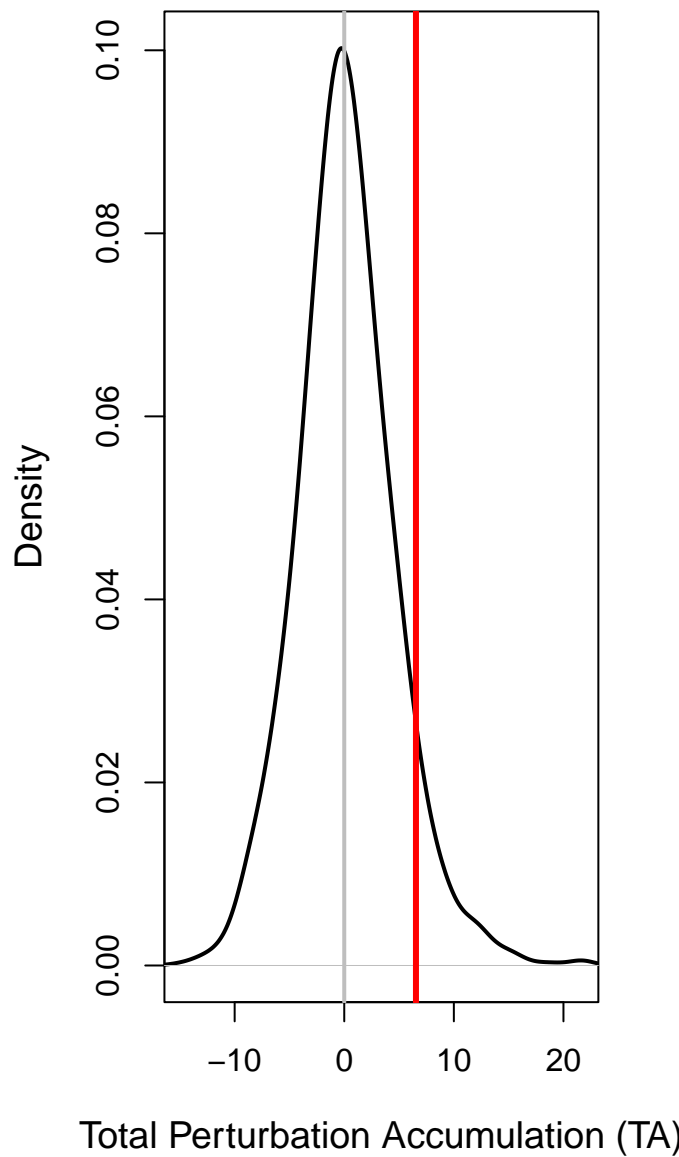
pathway ID=05016 P PERT=0.22



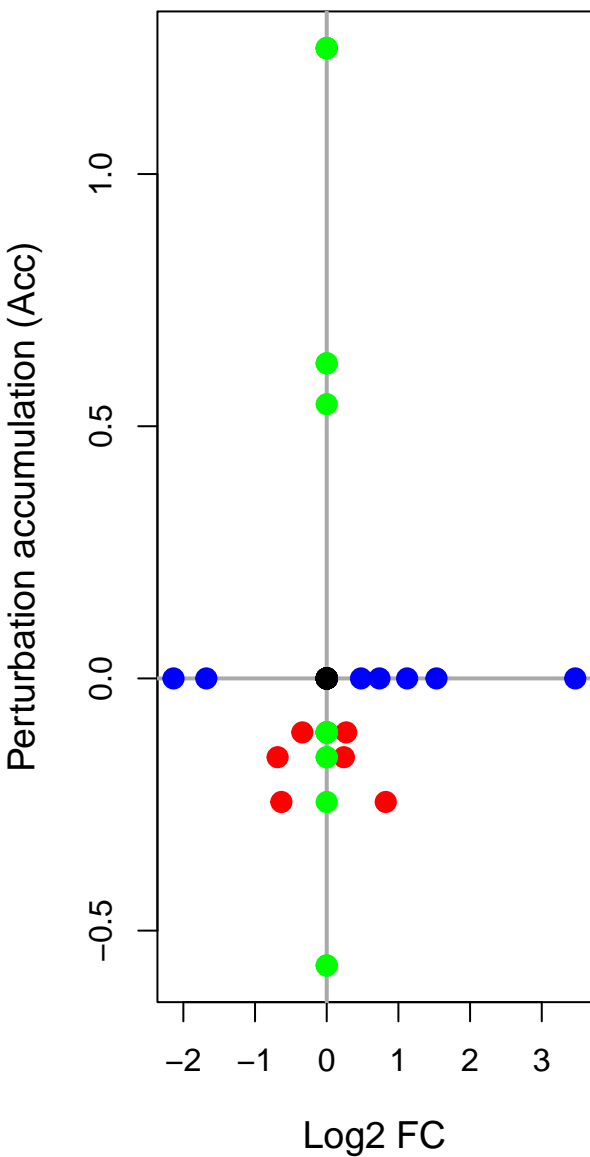
pathway ID=05020



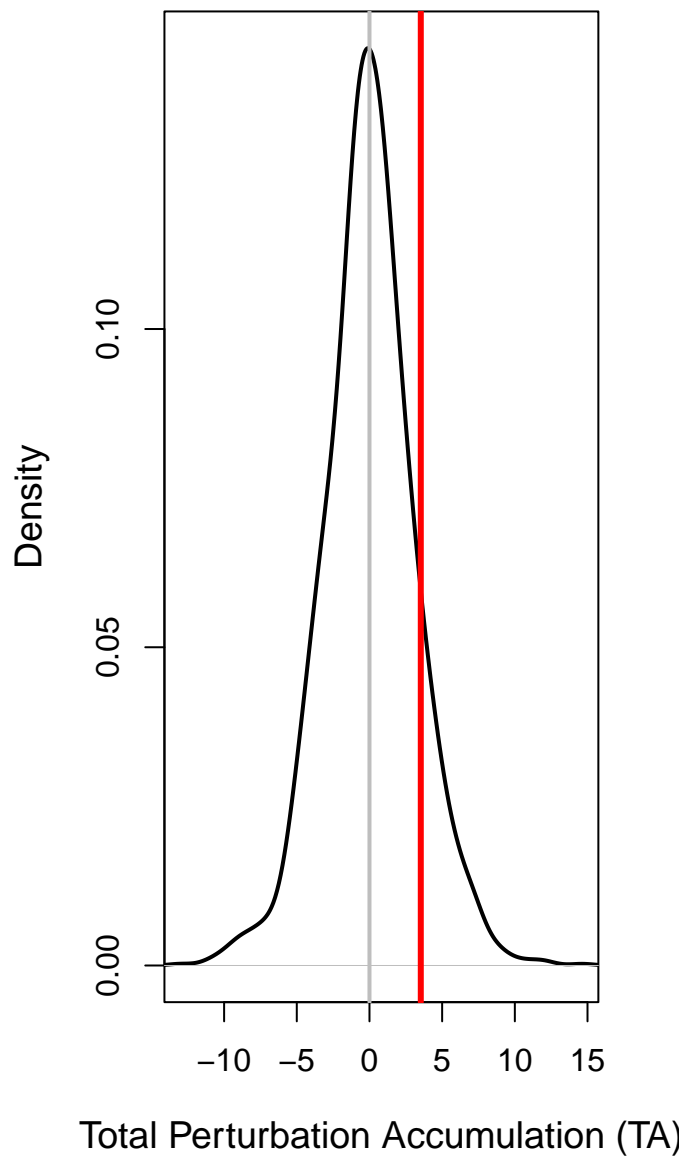
pathway ID=05020 P PERT=0.145



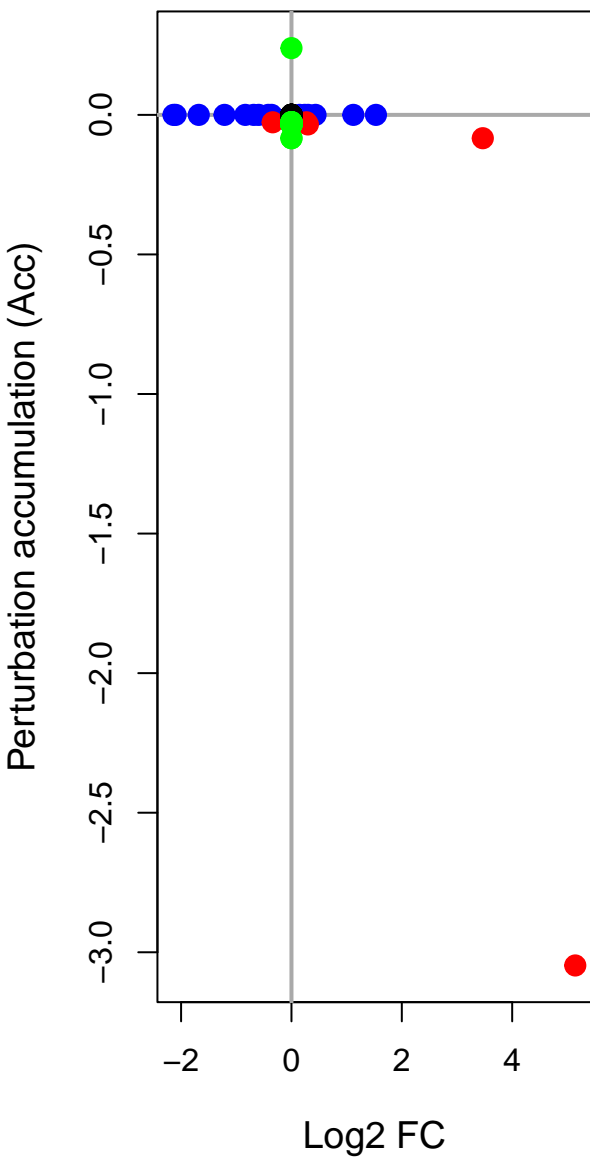
pathway ID=05030



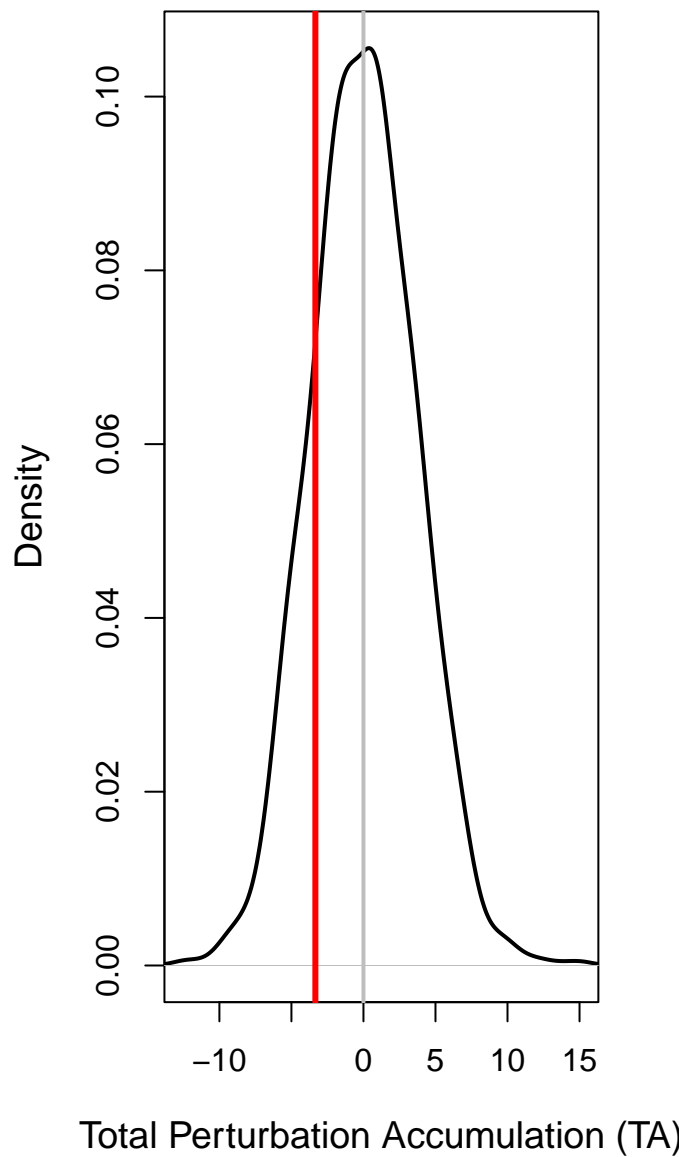
pathway ID=05030 P PERT=0.241



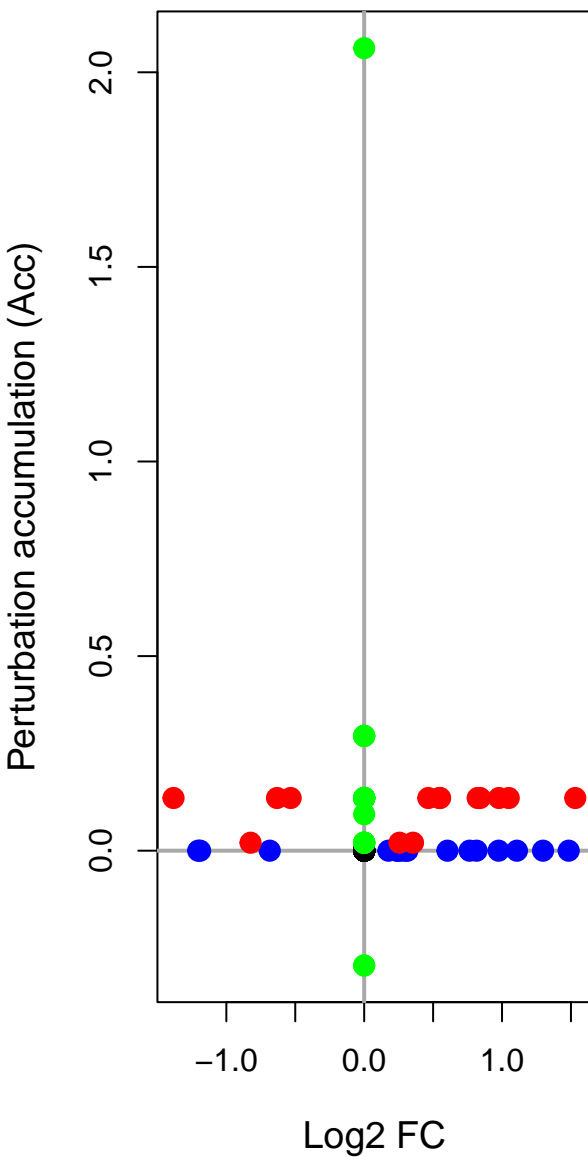
pathway ID=05031



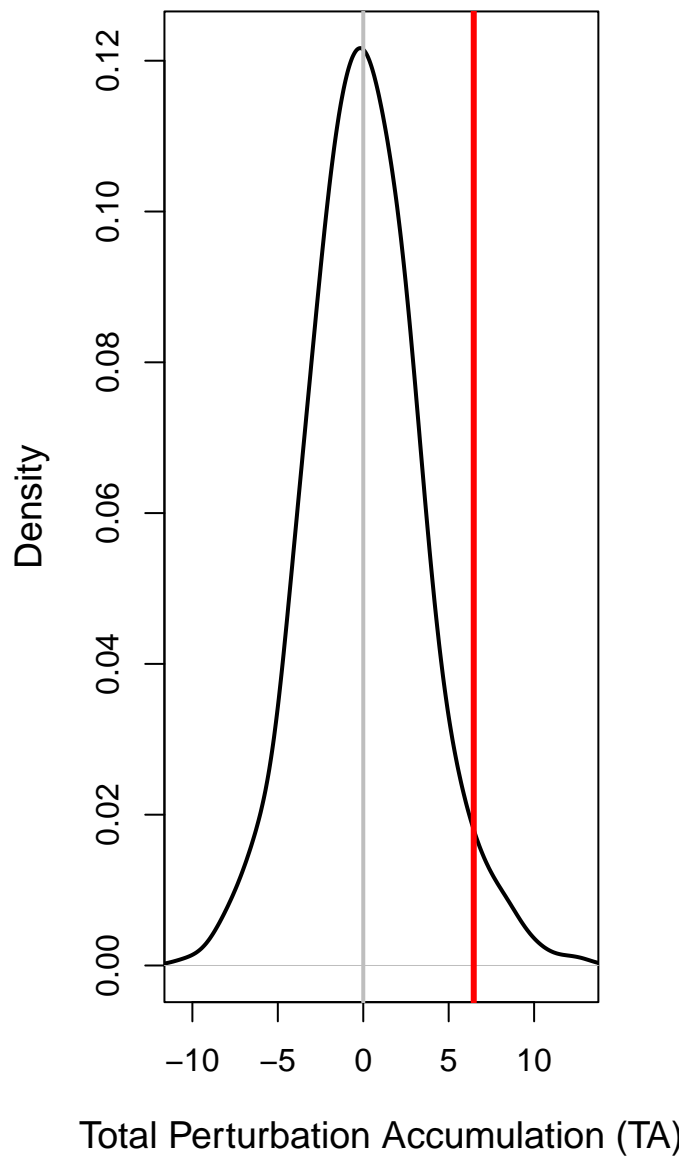
pathway ID=05031 P PERT=0.343



pathway ID=05032

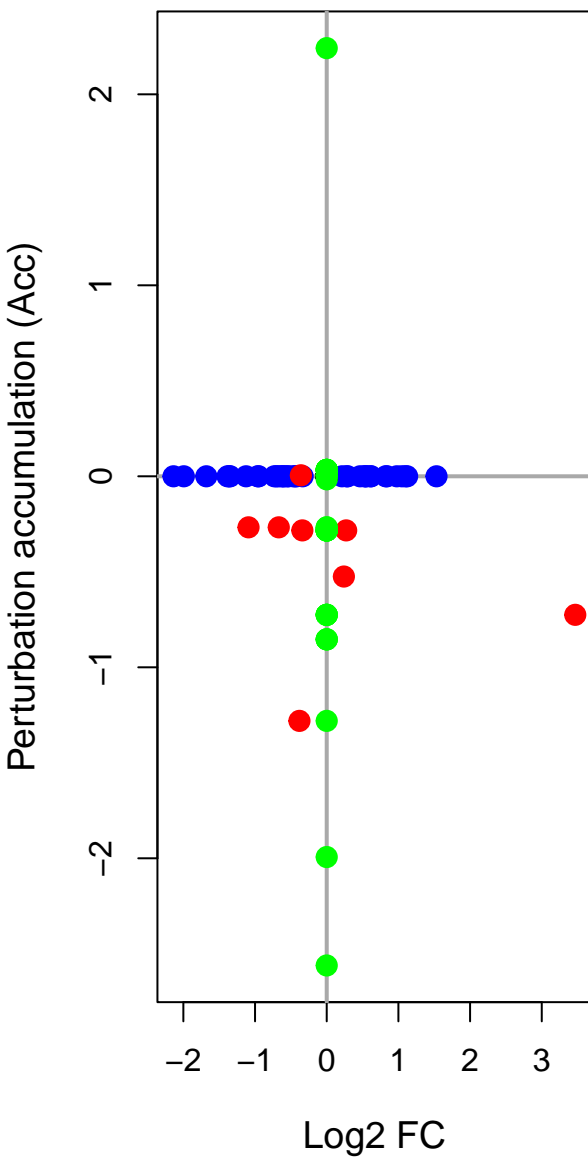


pathway ID=05032 P PERT=0.077

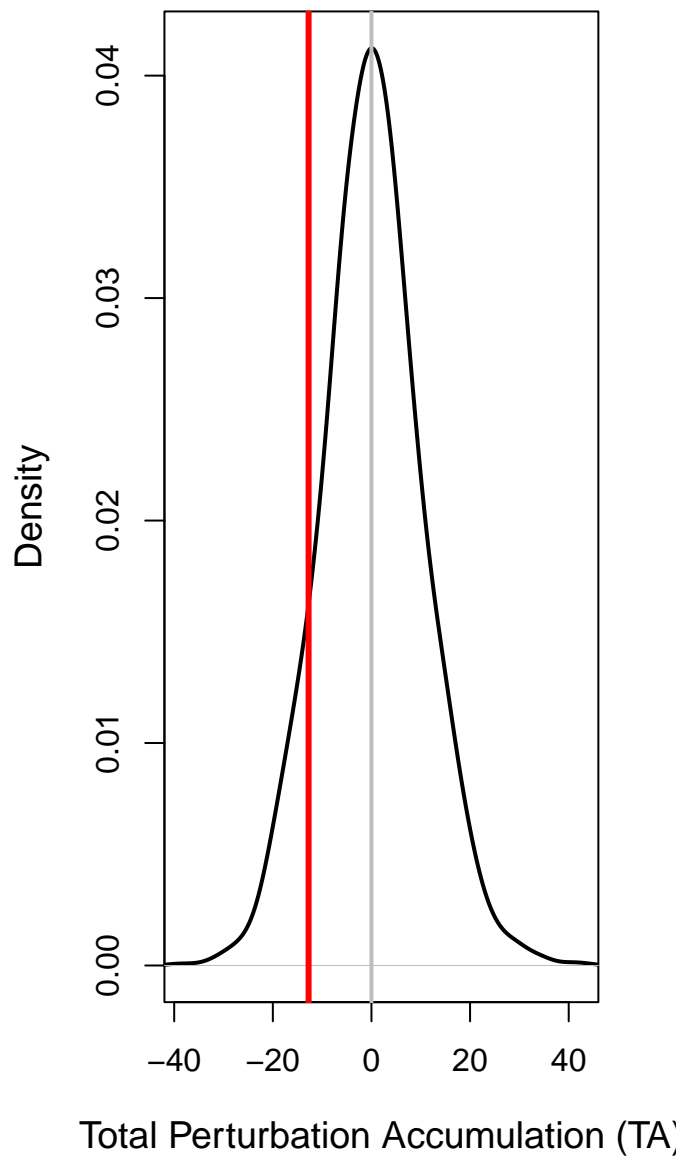




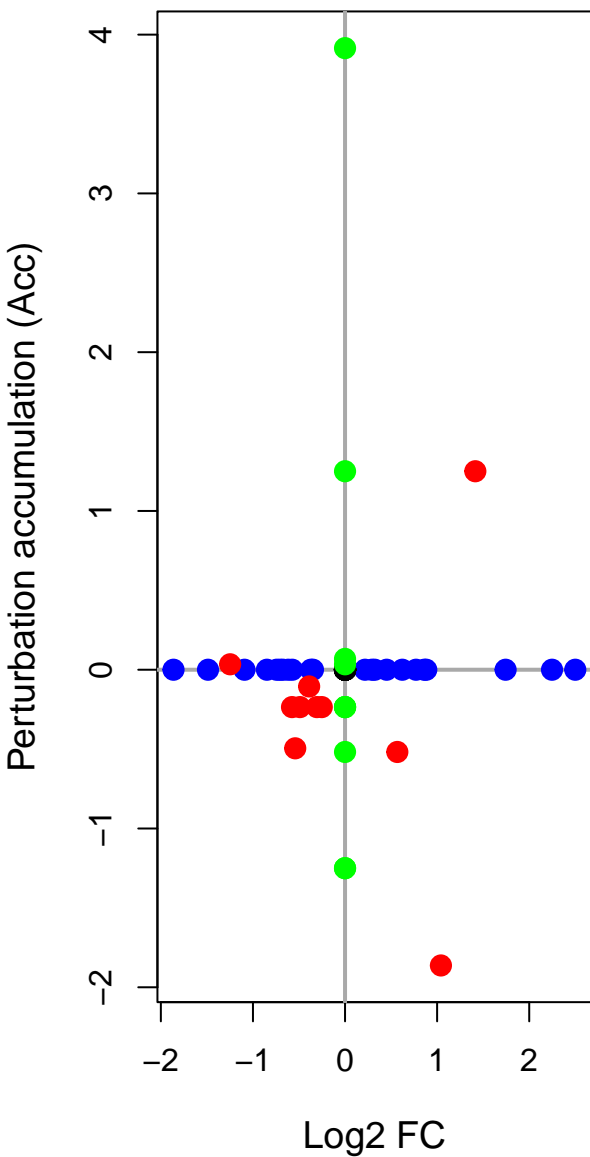
pathway ID=05034



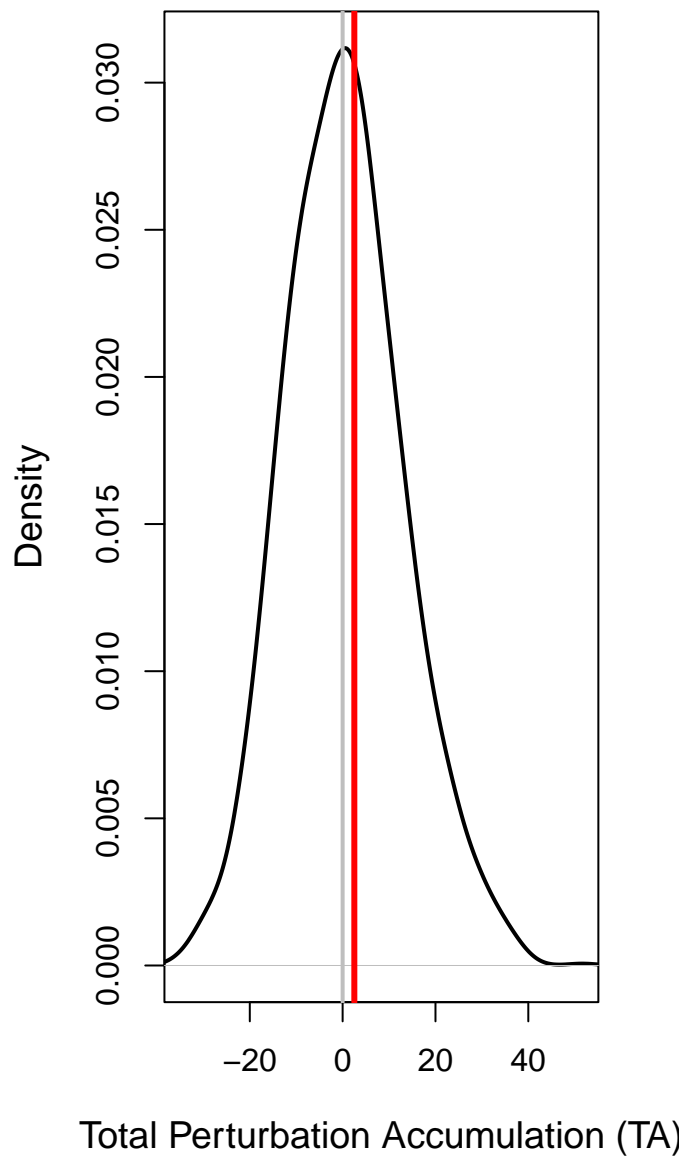
pathway ID=05034 P PERT=0.199



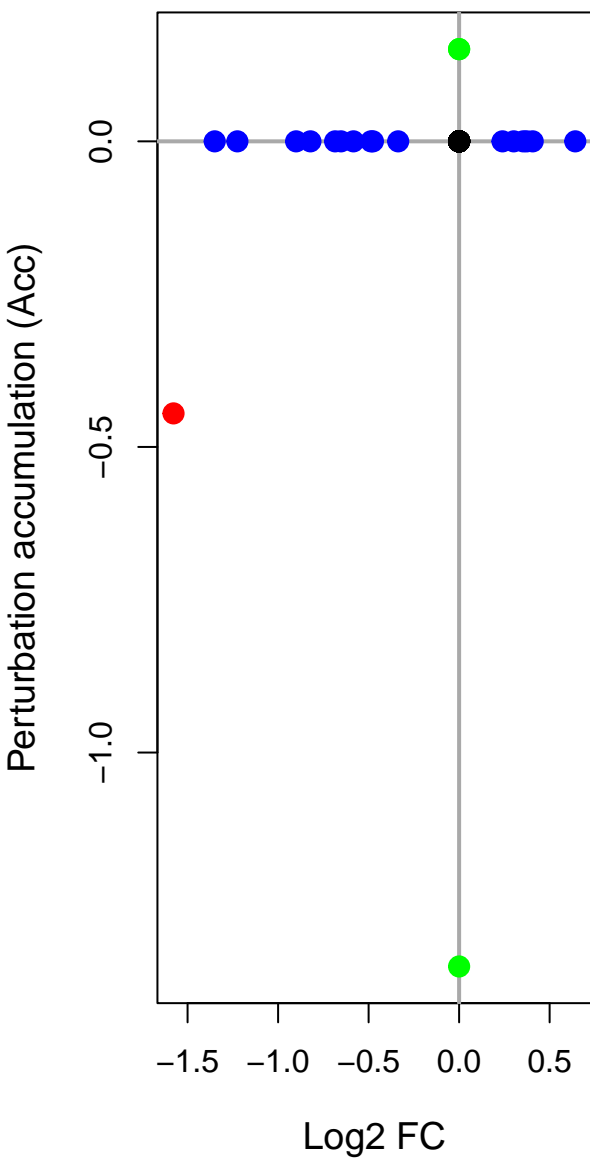
pathway ID=05100



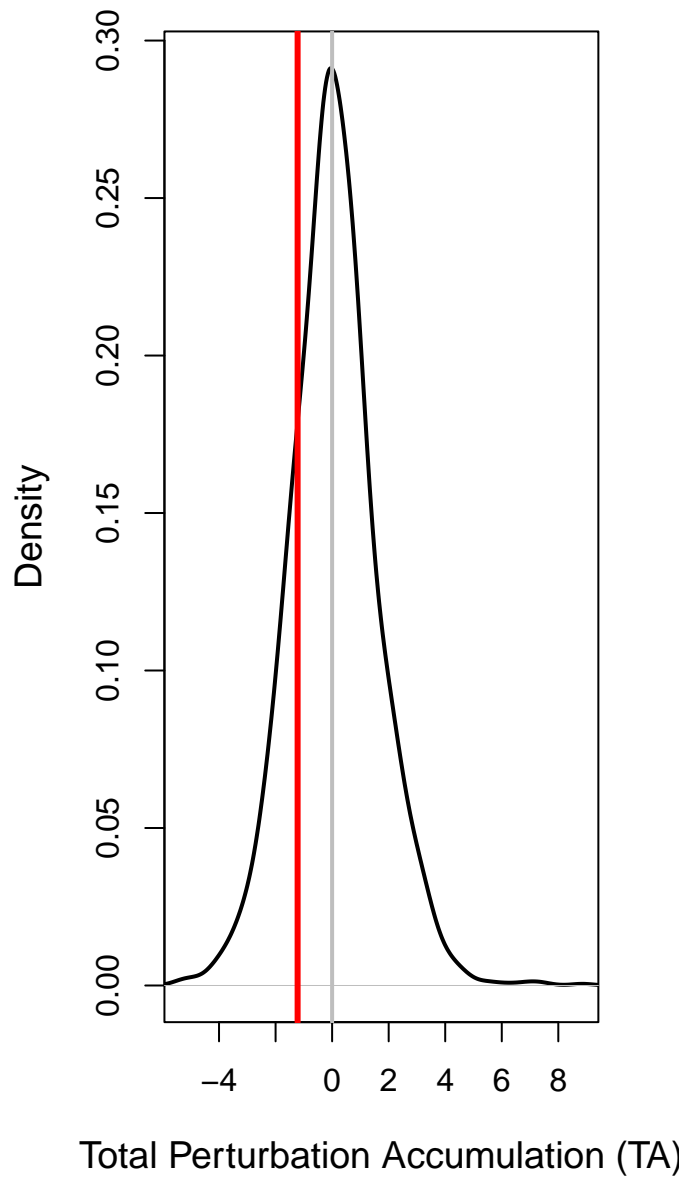
pathway ID=05100 P PERT=0.846



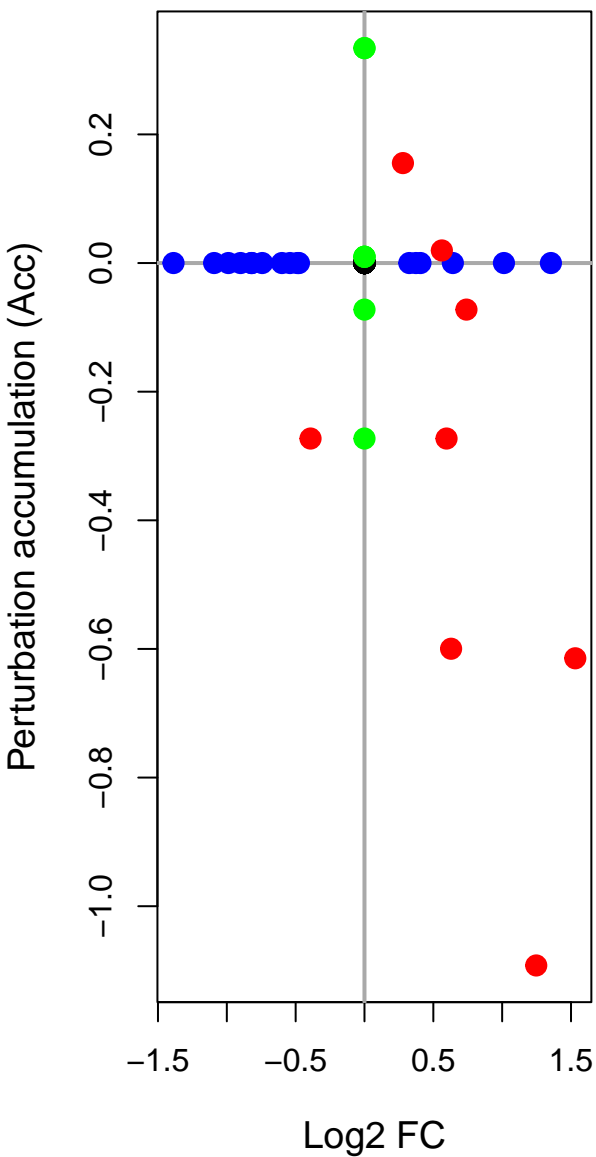
pathway ID=05110



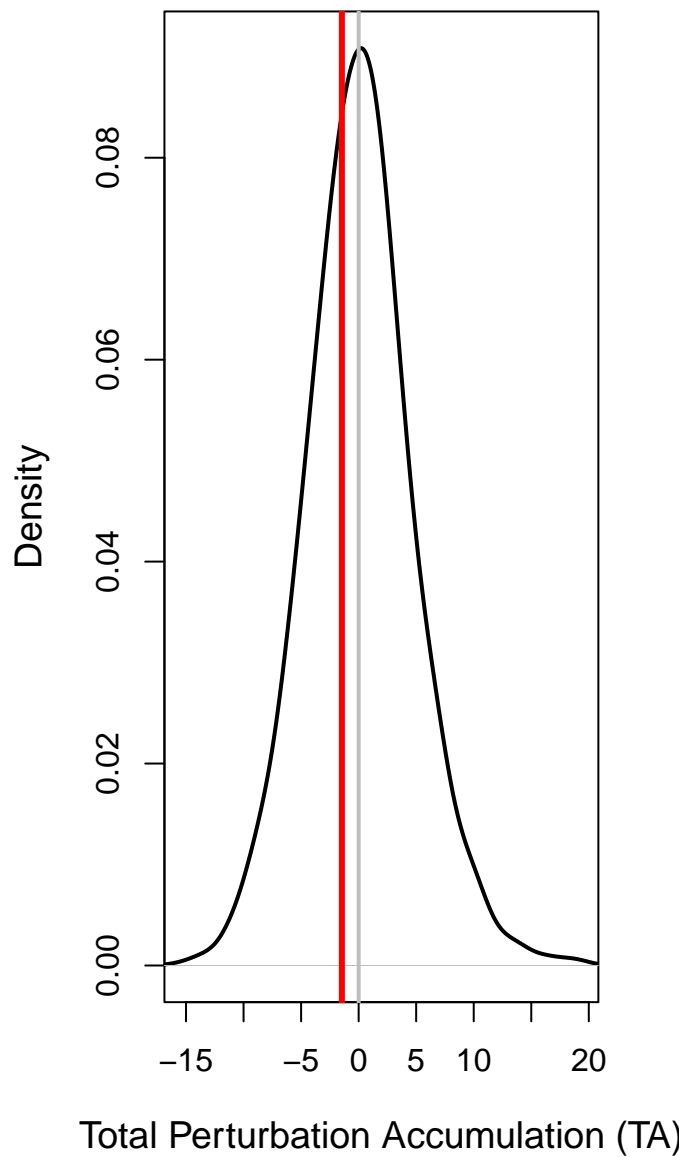
pathway ID=05110 P PERT=0.372



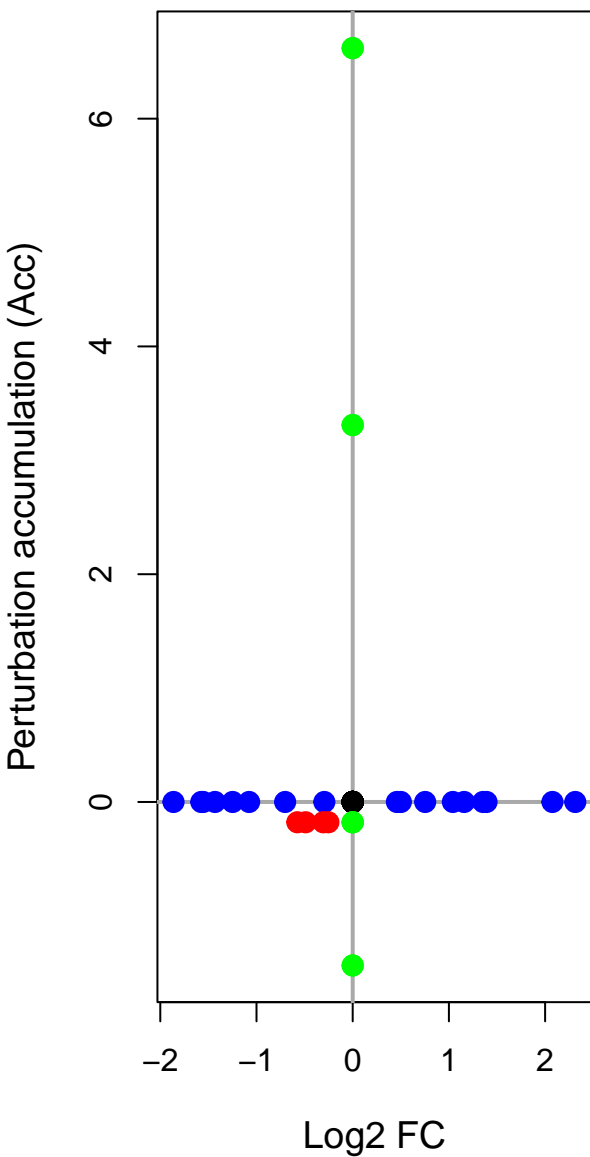
pathway ID=05120



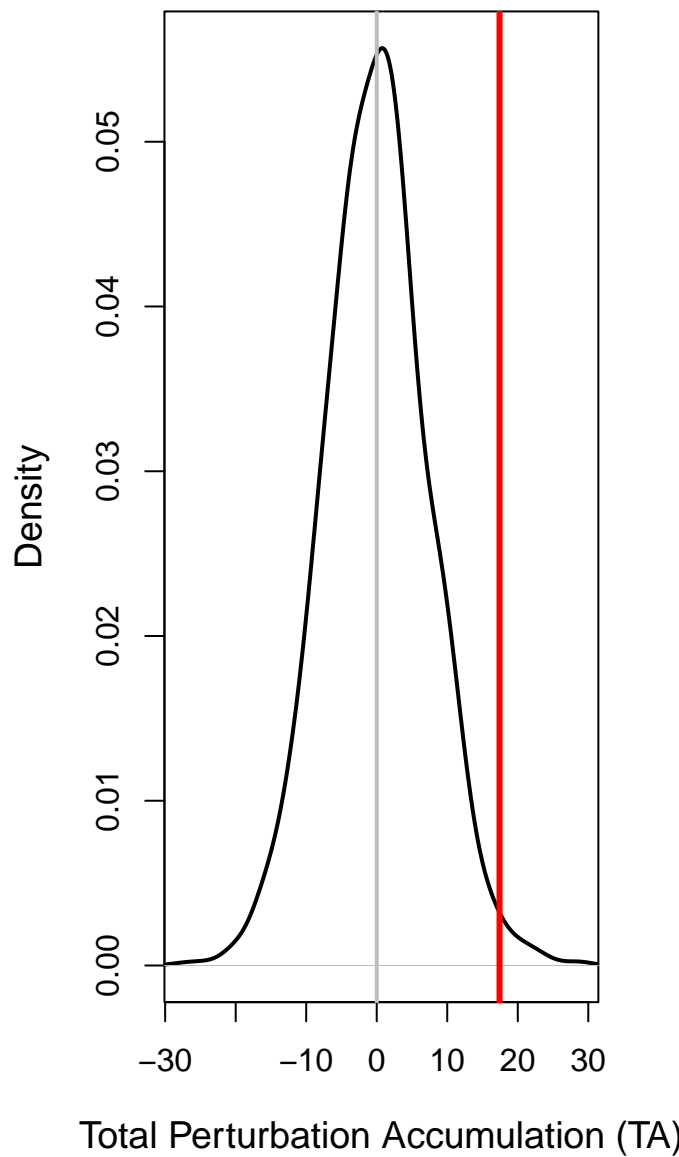
pathway ID=05120 P PERT=0.734



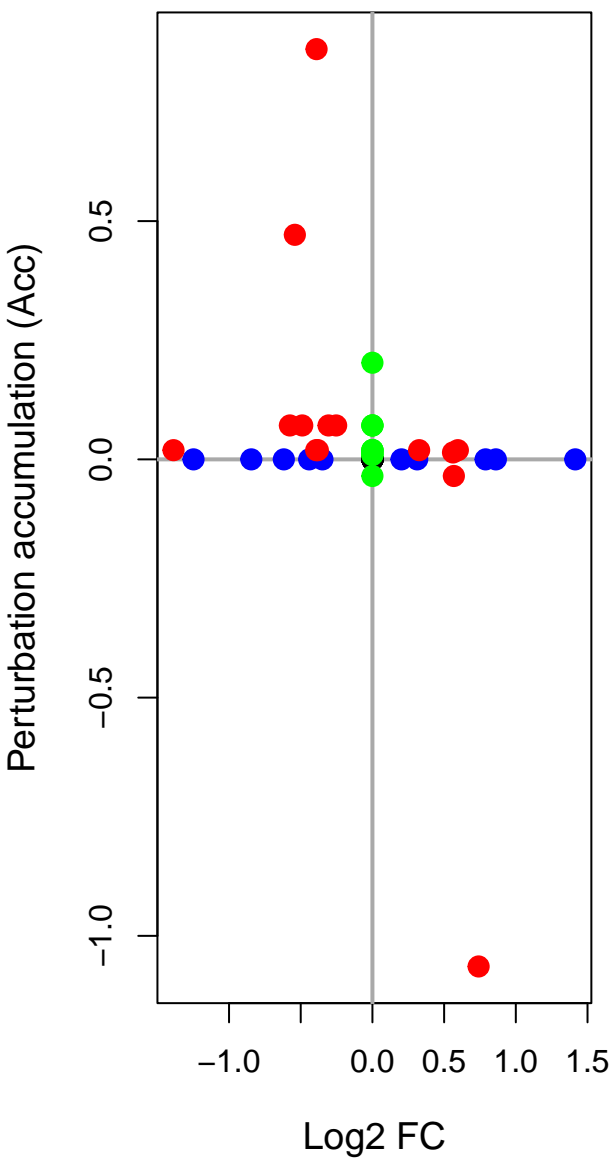
pathway ID=05130



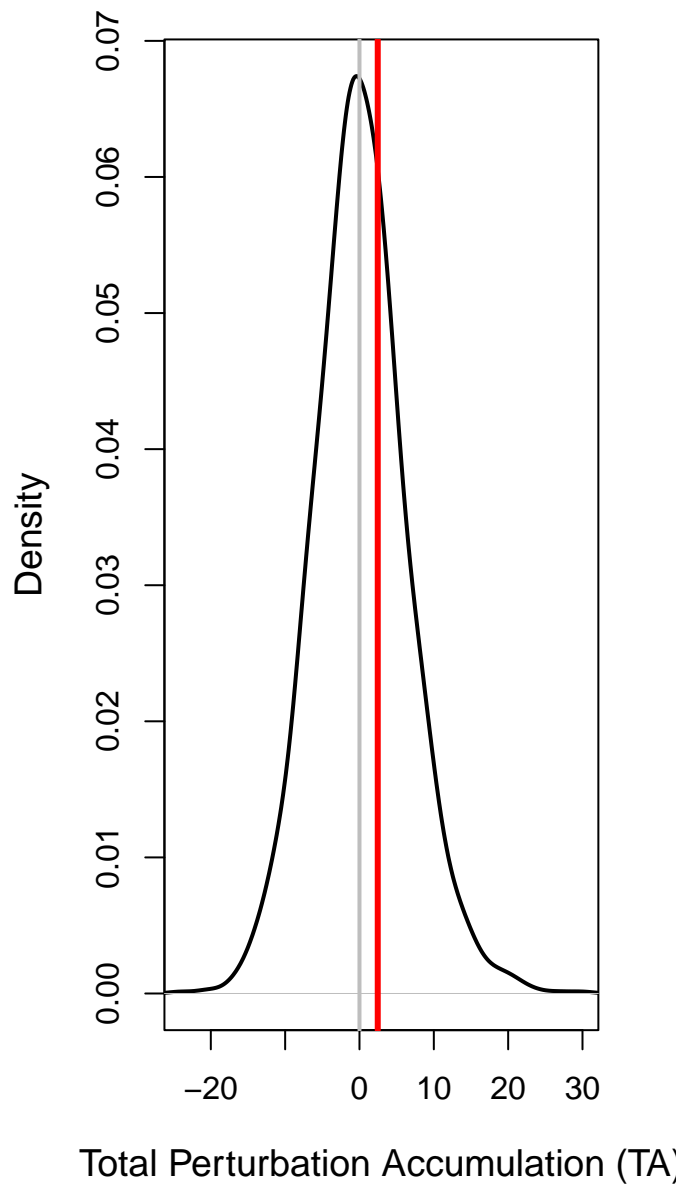
pathway ID=05130 P PERT=0.022



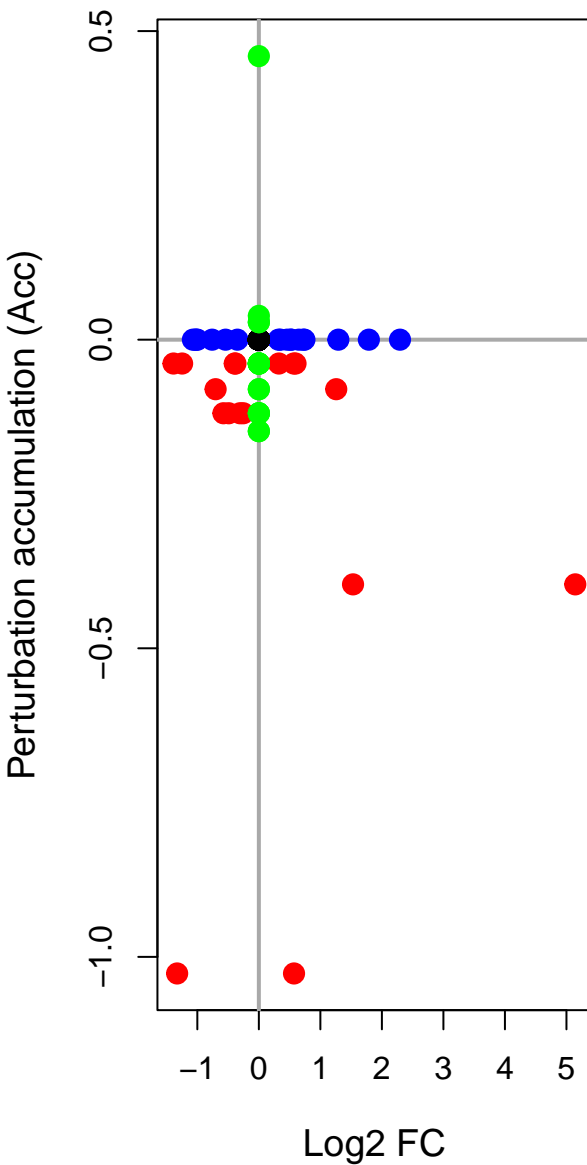
pathway ID=05131



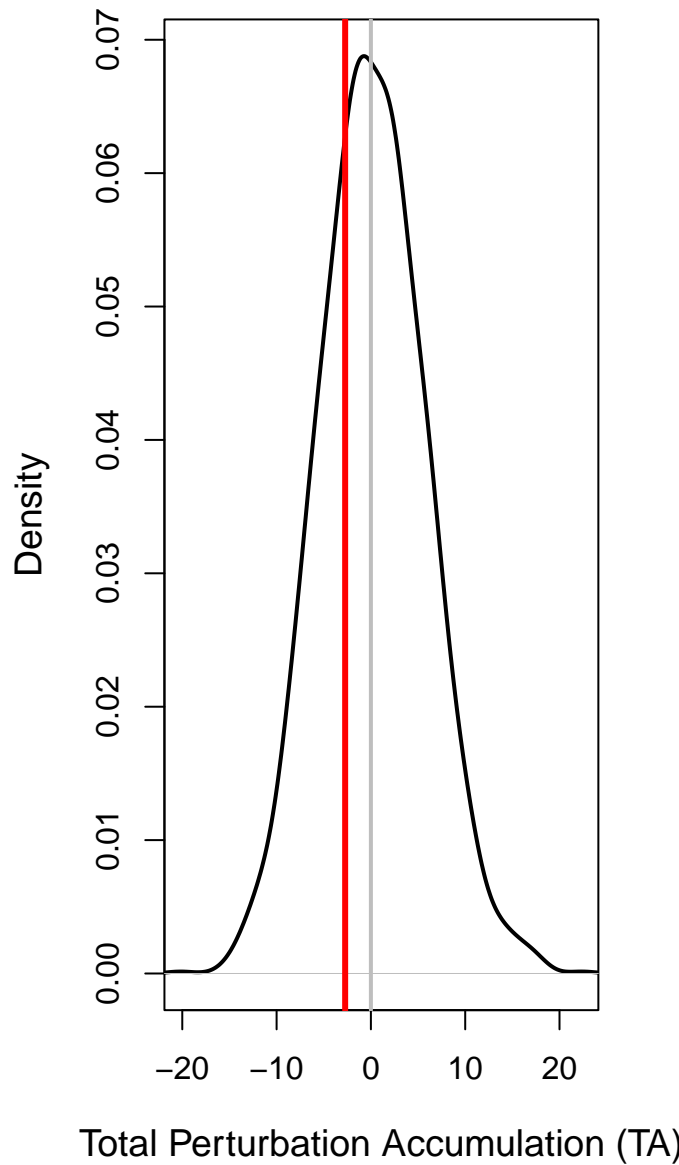
pathway ID=05131 P PERT=0.677



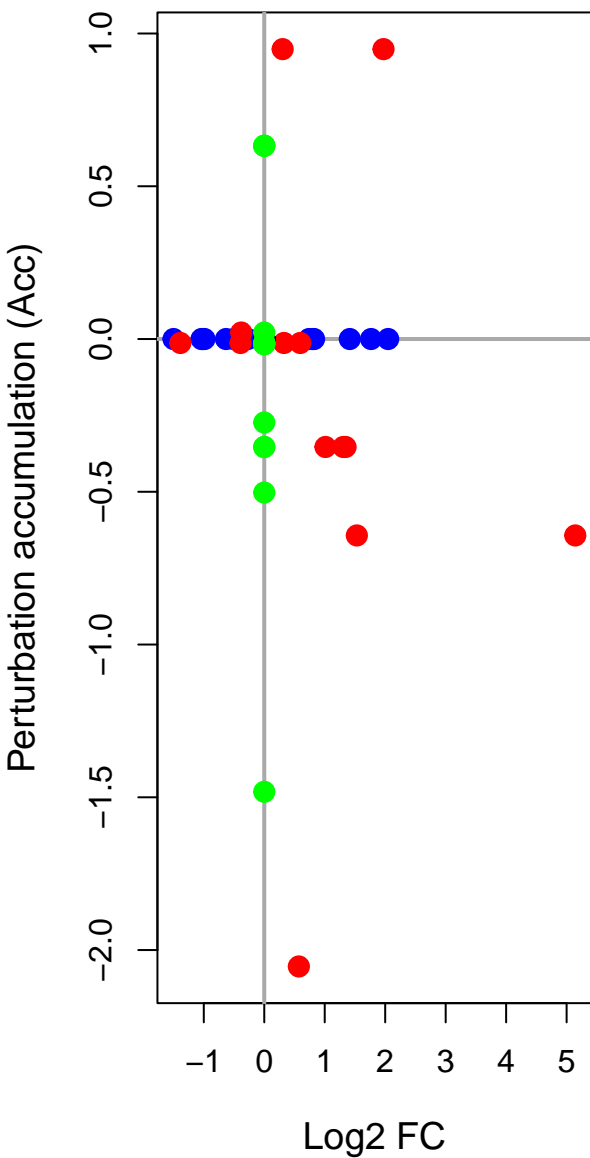
pathway ID=05132



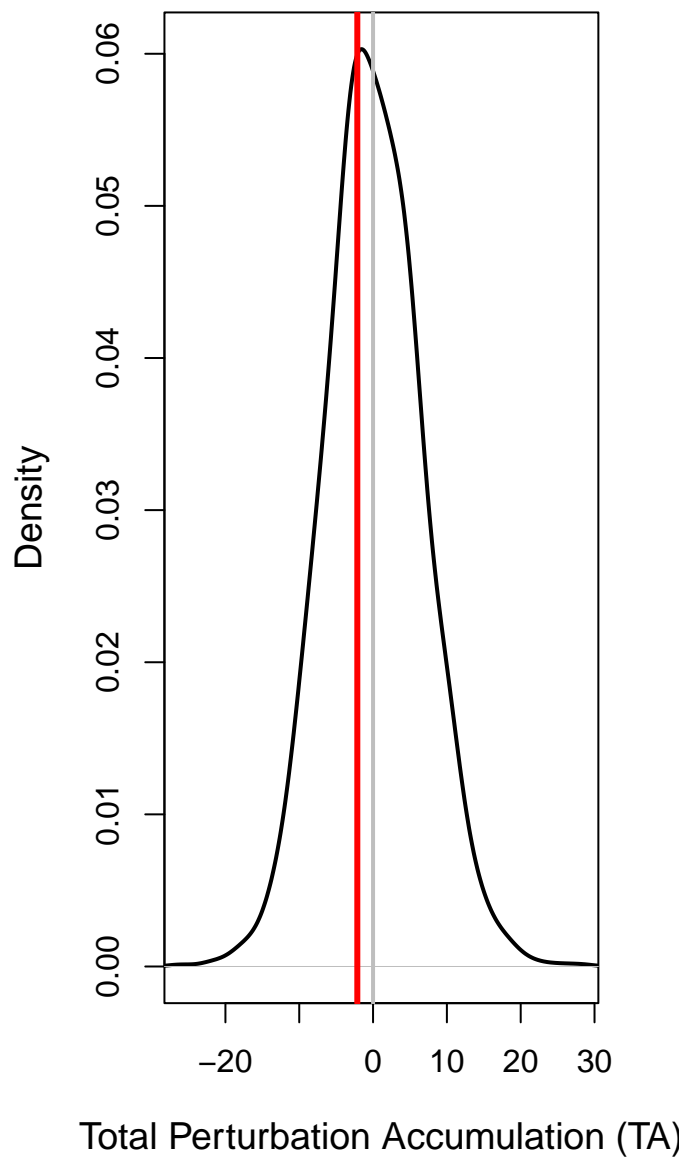
pathway ID=05132 P PERT=0.604



pathway ID=05133

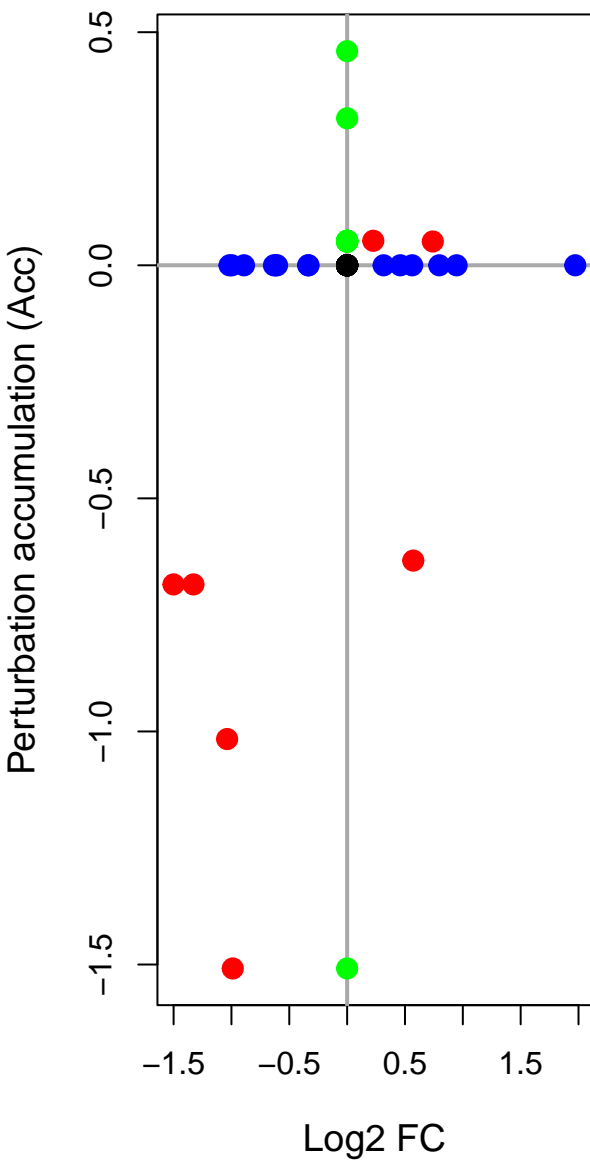


pathway ID=05133 P PERT=0.75

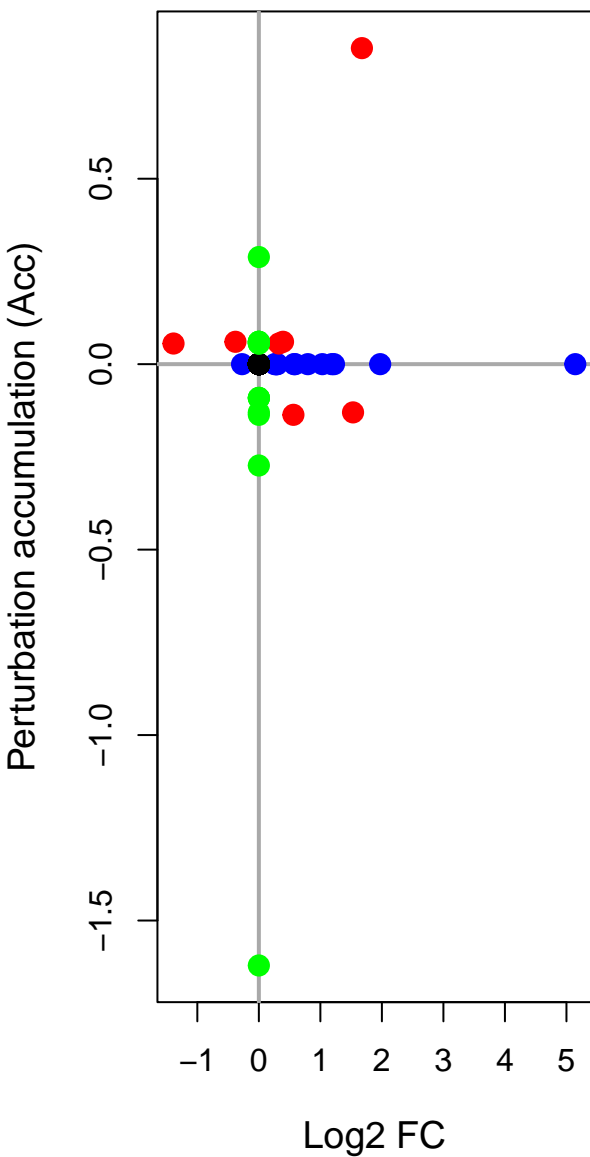




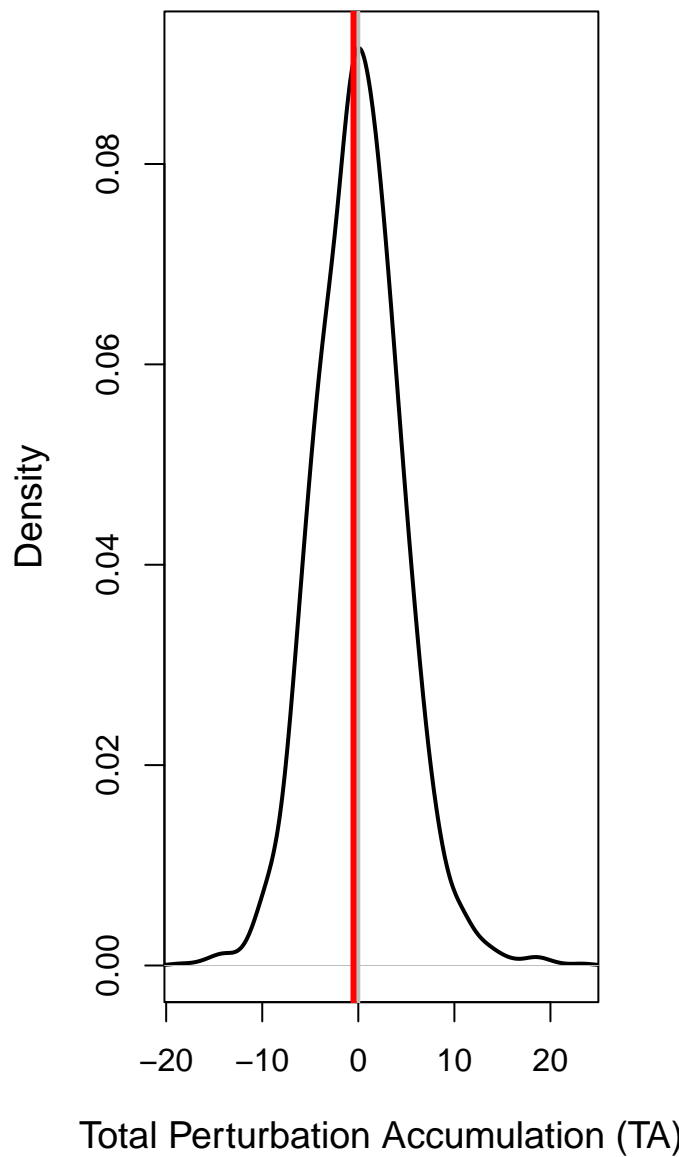
pathway ID=05134



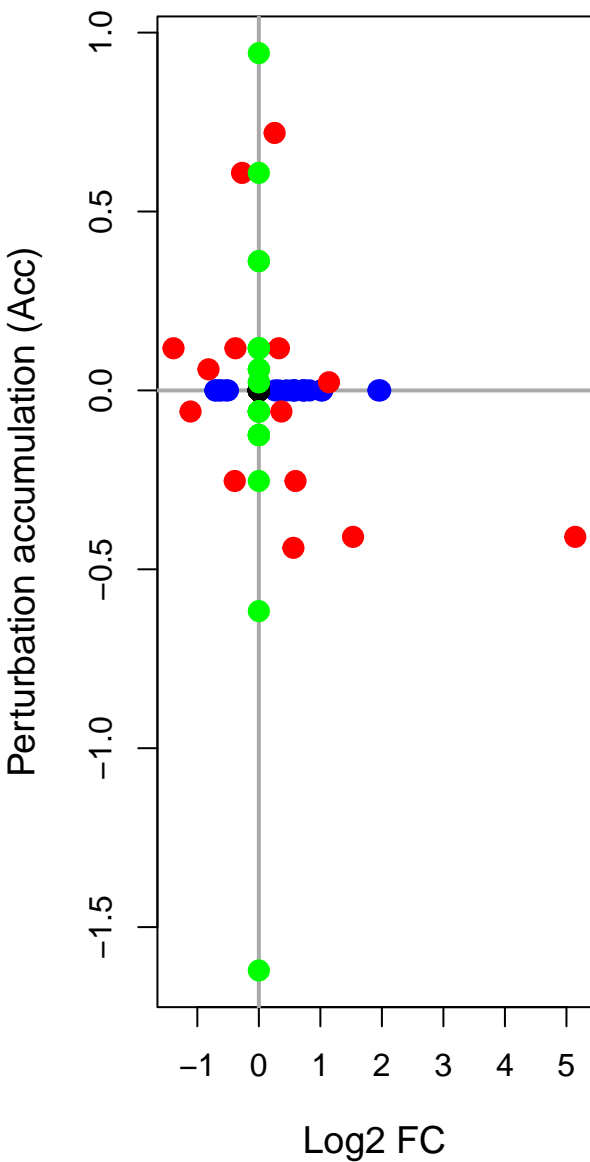
pathway ID=05140



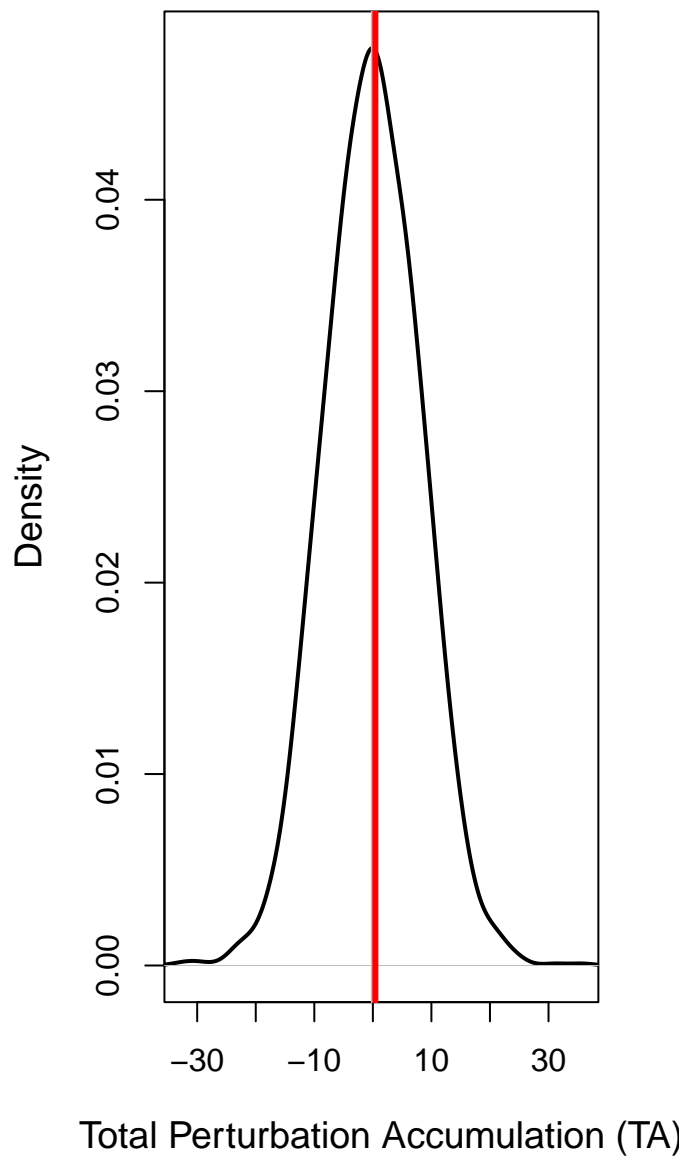
pathway ID=05140 P PERT=0.903



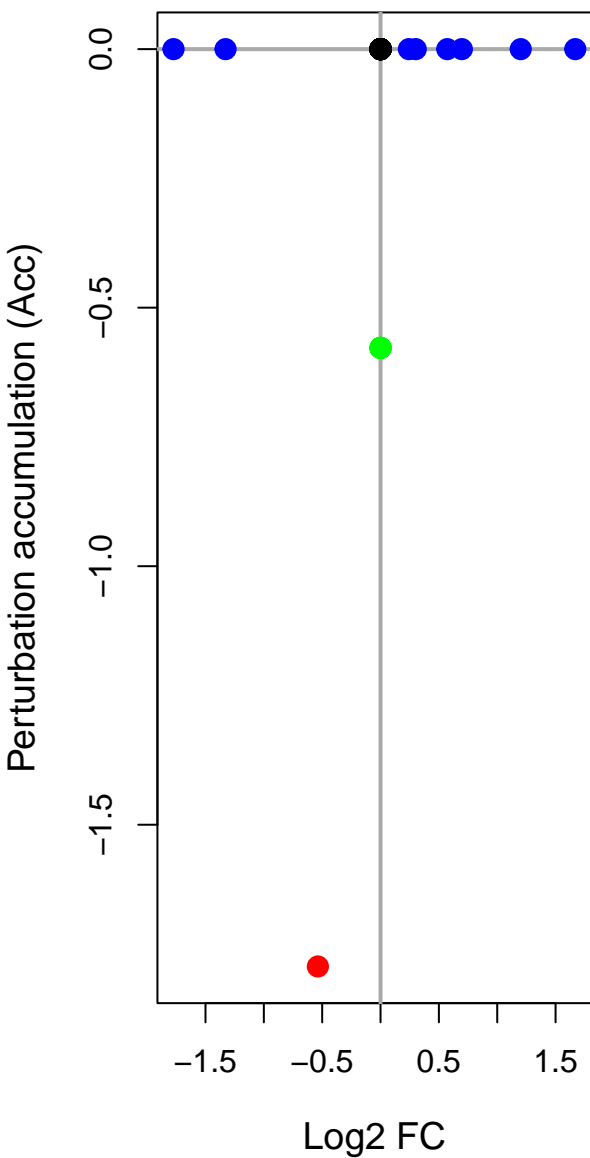
pathway ID=05142



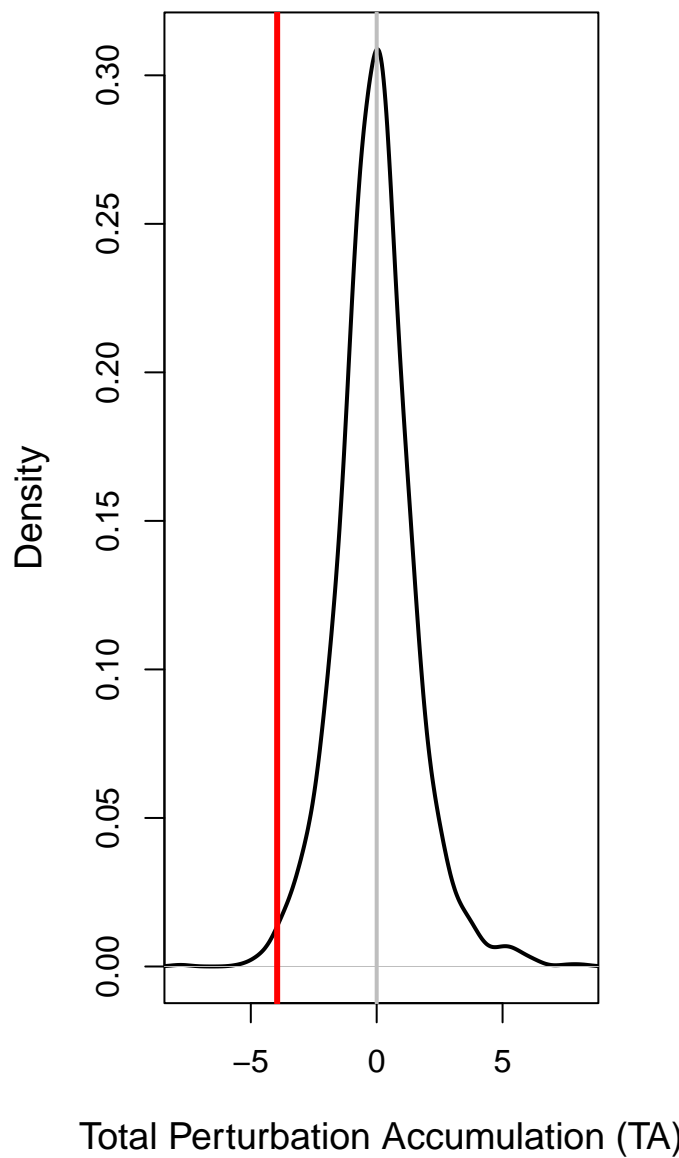
pathway ID=05142 P PERT=0.948



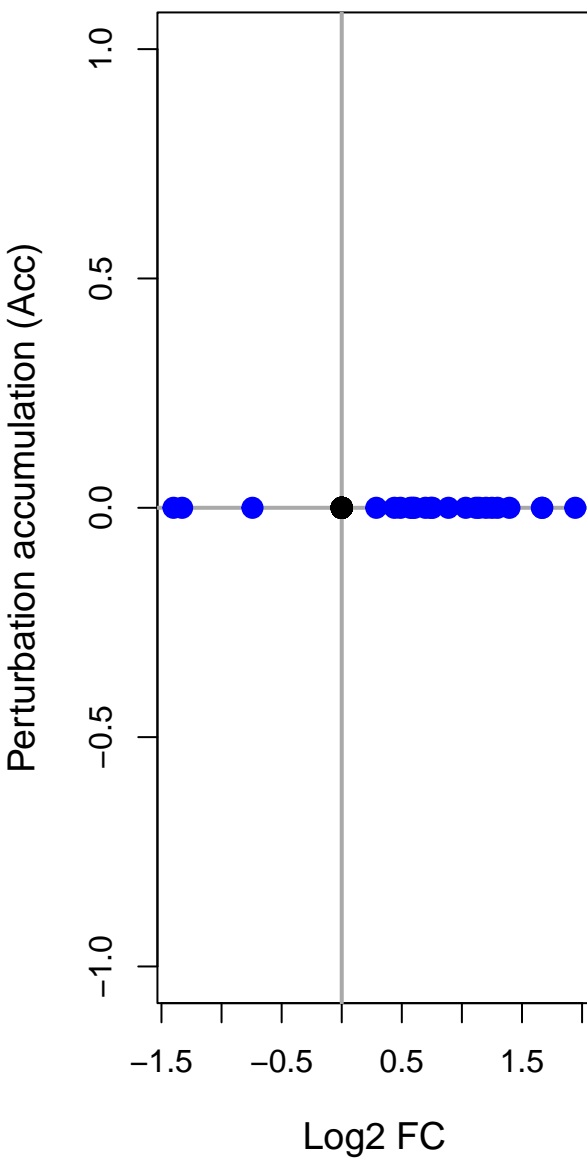
pathway ID=05143



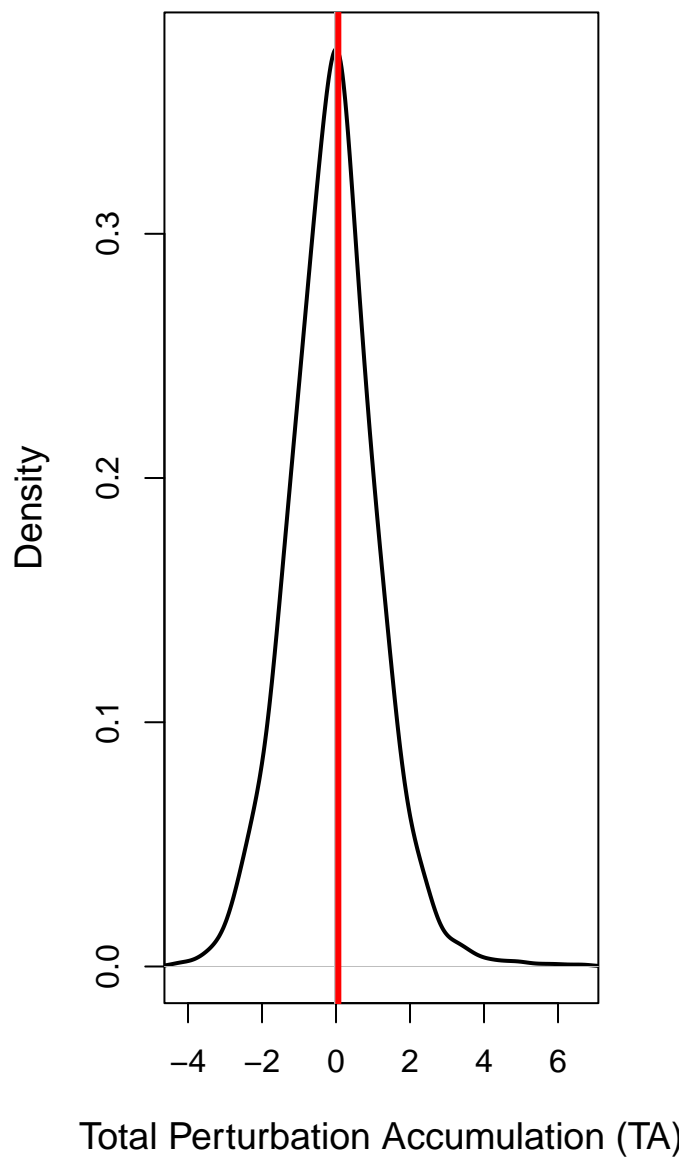
pathway ID=05143 P PERT=0.014



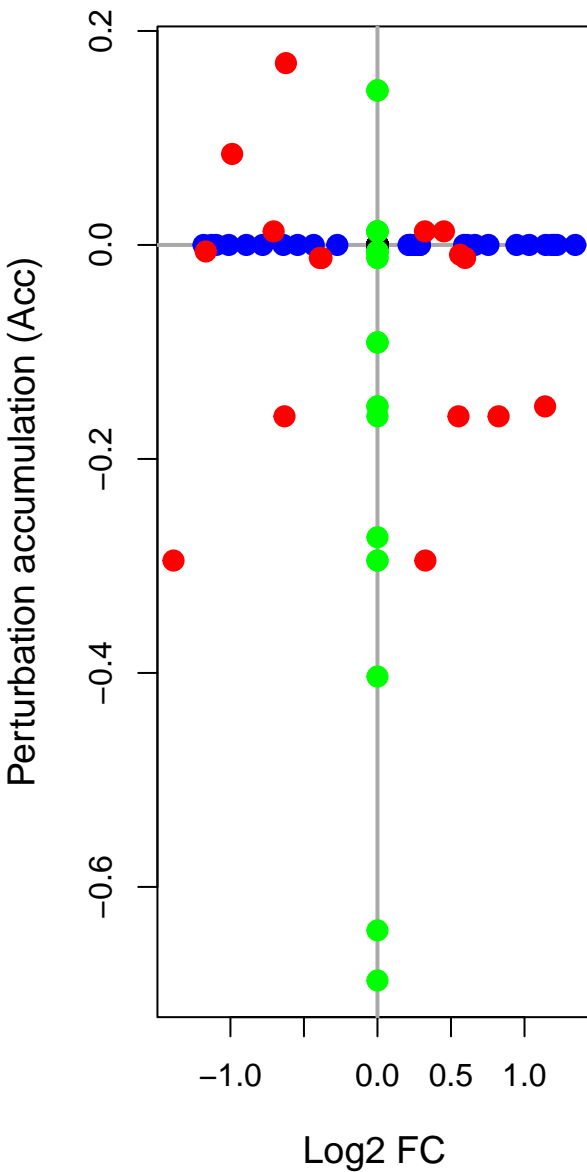
pathway ID=05144



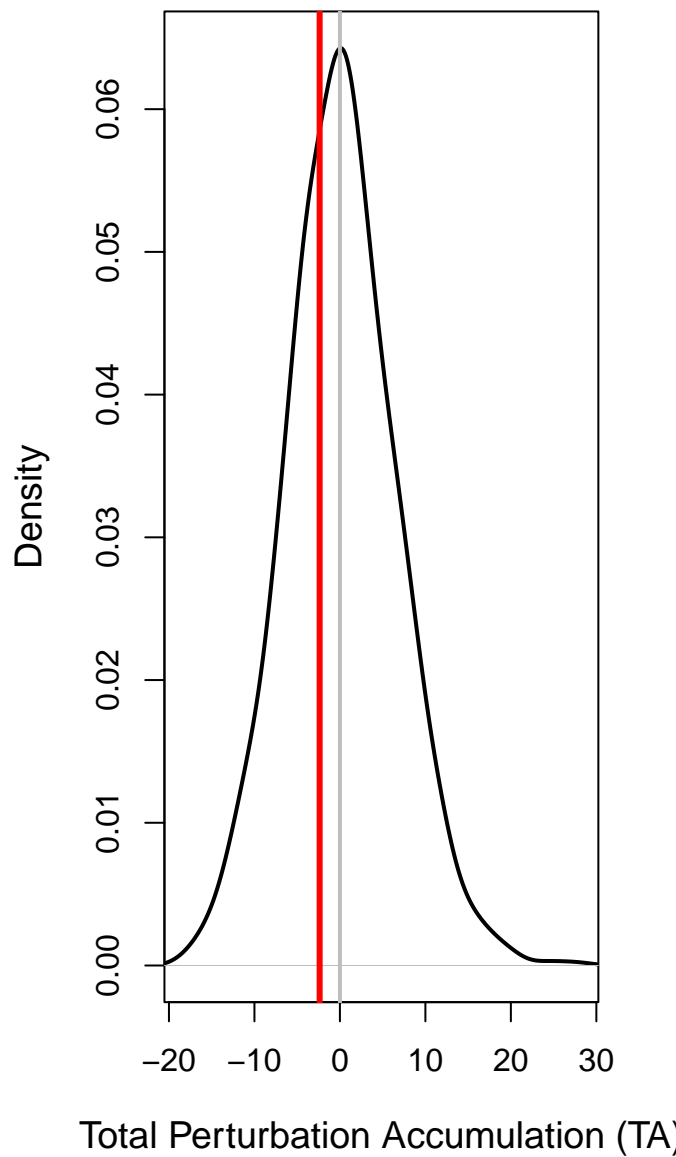
pathway ID=05144 P PERT=0.982



pathway ID=05145



pathway ID=05145 P PERT=0.698



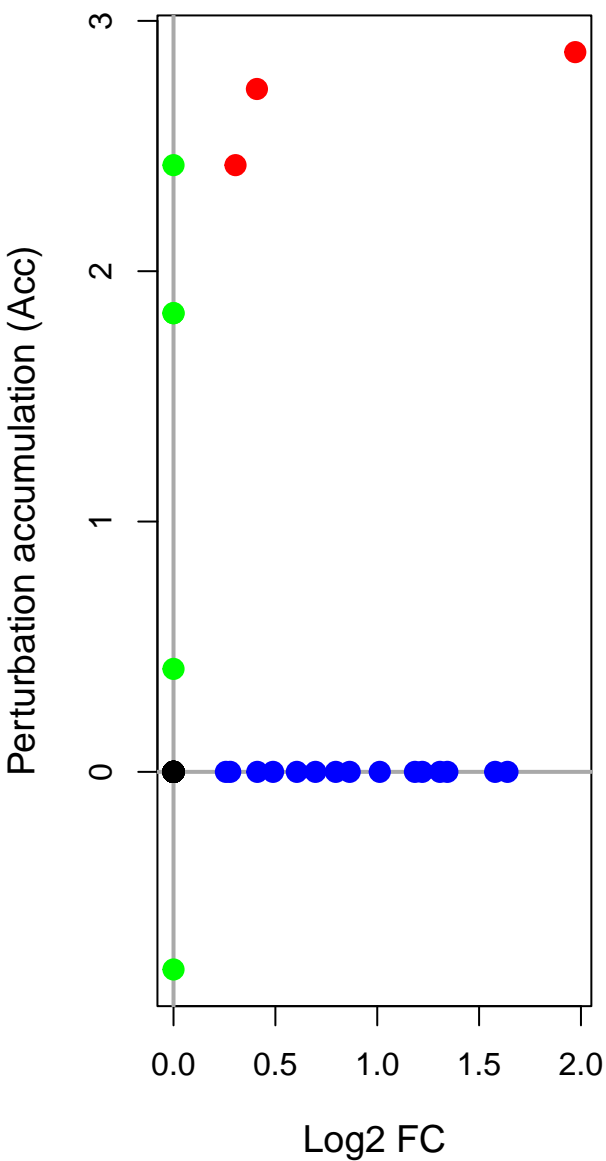
A scatter plot illustrating data points for three classes: red, green, and blue. The x-axis ranges from -1 to 2, and the y-axis ranges from -1 to 1. Red points are scattered in the upper half, green points are clustered near the origin, and blue points form a horizontal line at y=0.

Log2 FC

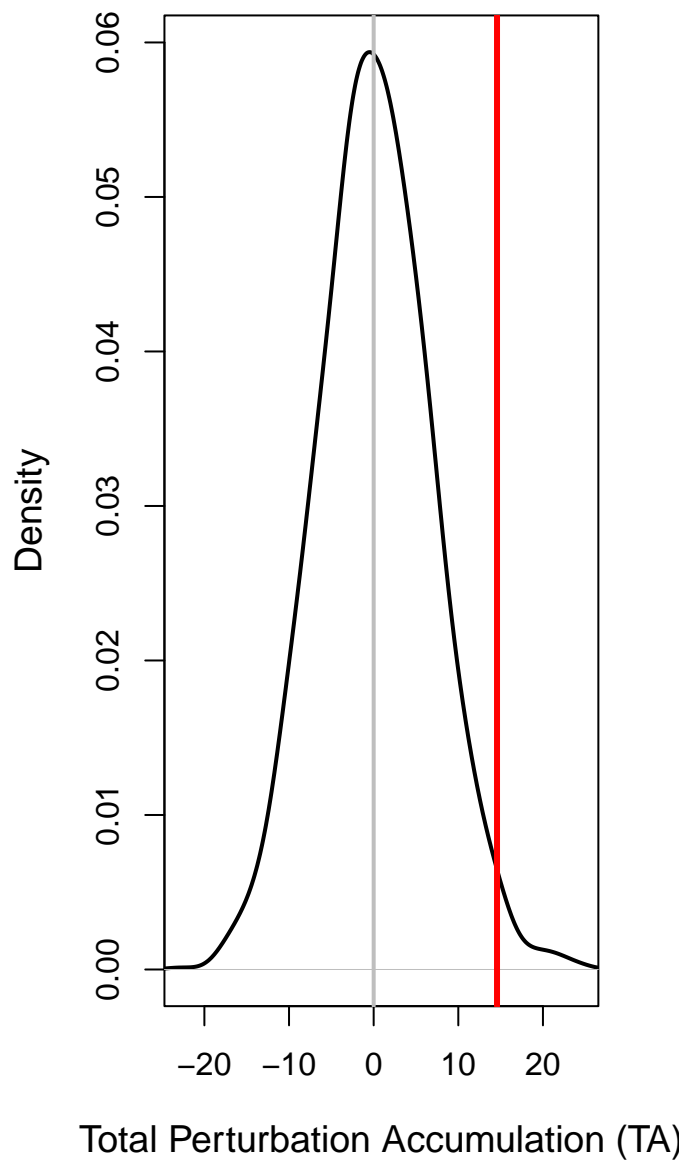
A plot of a normal distribution curve. The x-axis ranges from -10 to 10 with major ticks at -10, -5, 0, 5, and 10. The y-axis ranges from 0.00 to 0.10 with major ticks at 0.00, 0.02, 0.04, 0.06, 0.08, and 0.10. A black curve represents the probability density function, peaking at x=0 with a value of approximately 0.10. A vertical red line is drawn at x=0, passing through the peak of the curve. A horizontal grey line is drawn at y=0.

## Total Perturbation Accumulation

pathway ID=05150

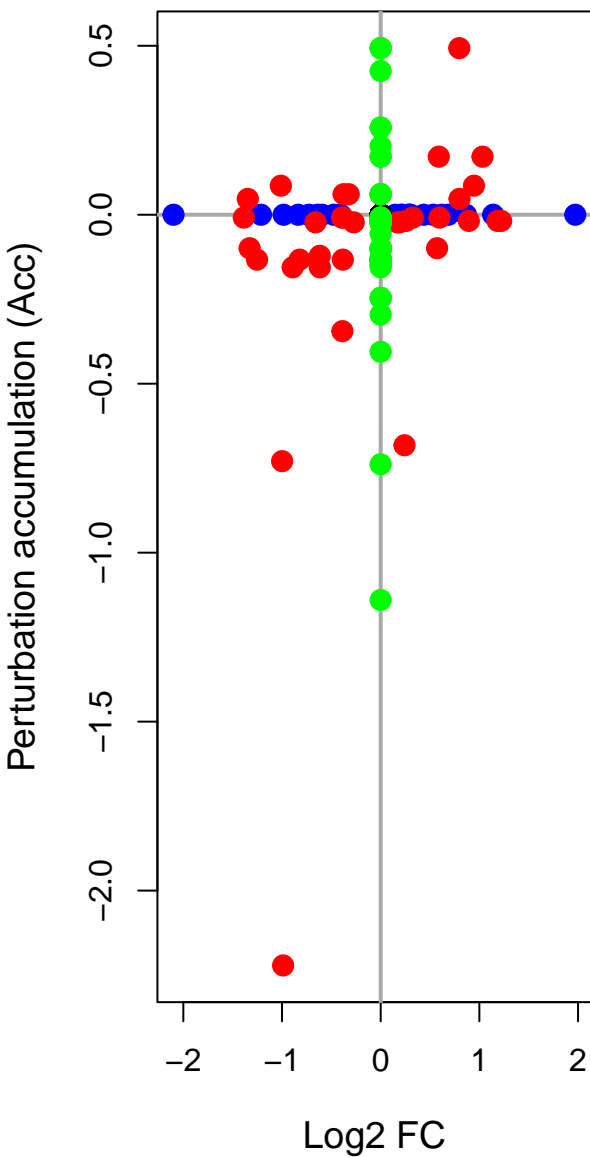


pathway ID=05150 P PERT=0.032

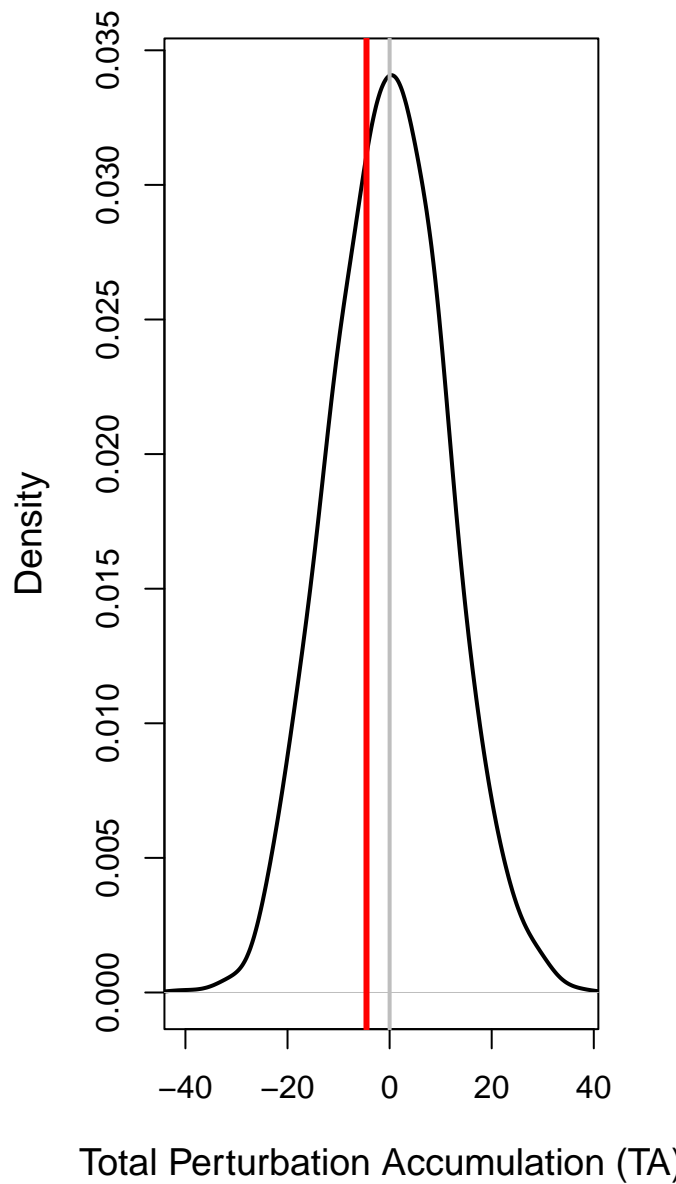




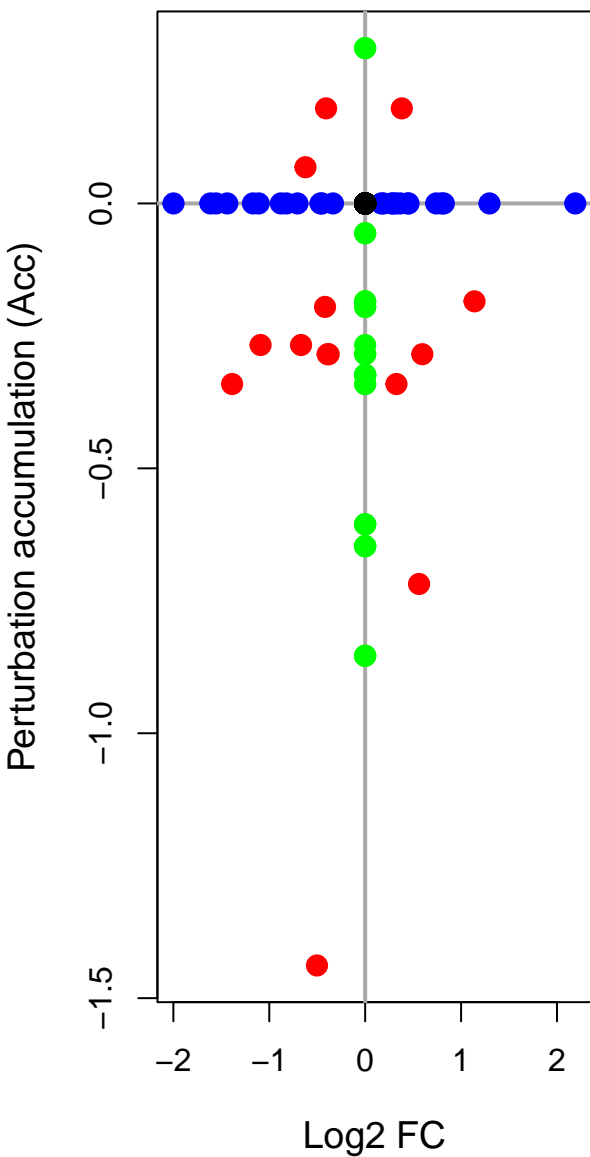
pathway ID=05152



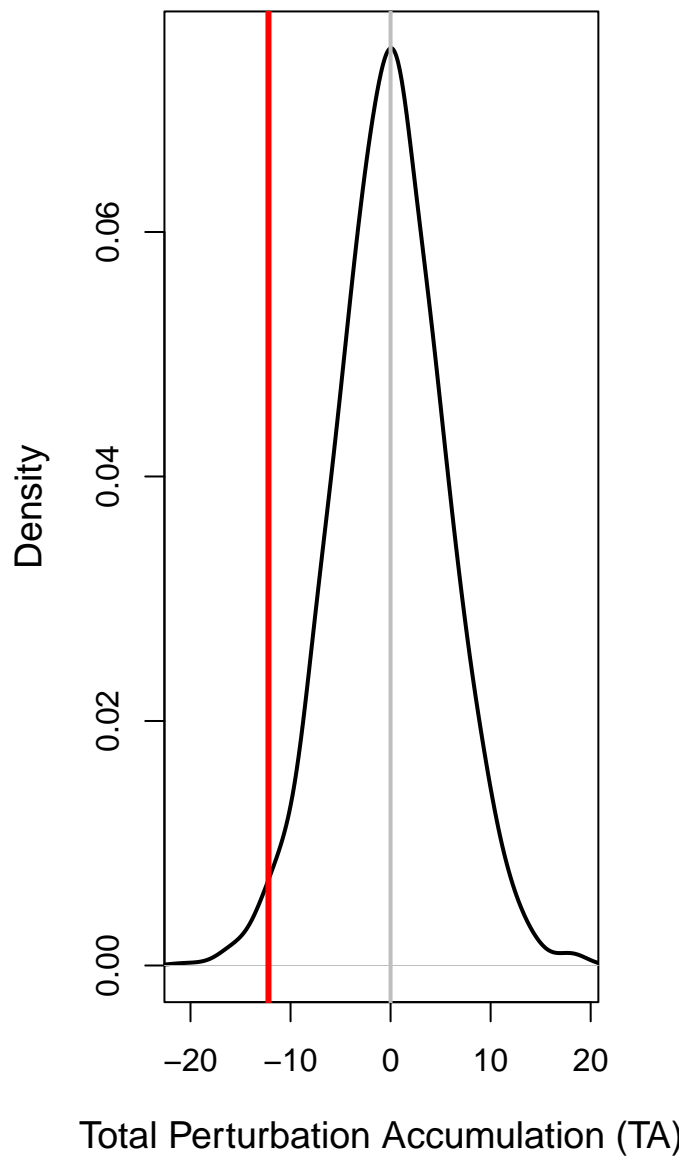
pathway ID=05152 P PERT=0.691



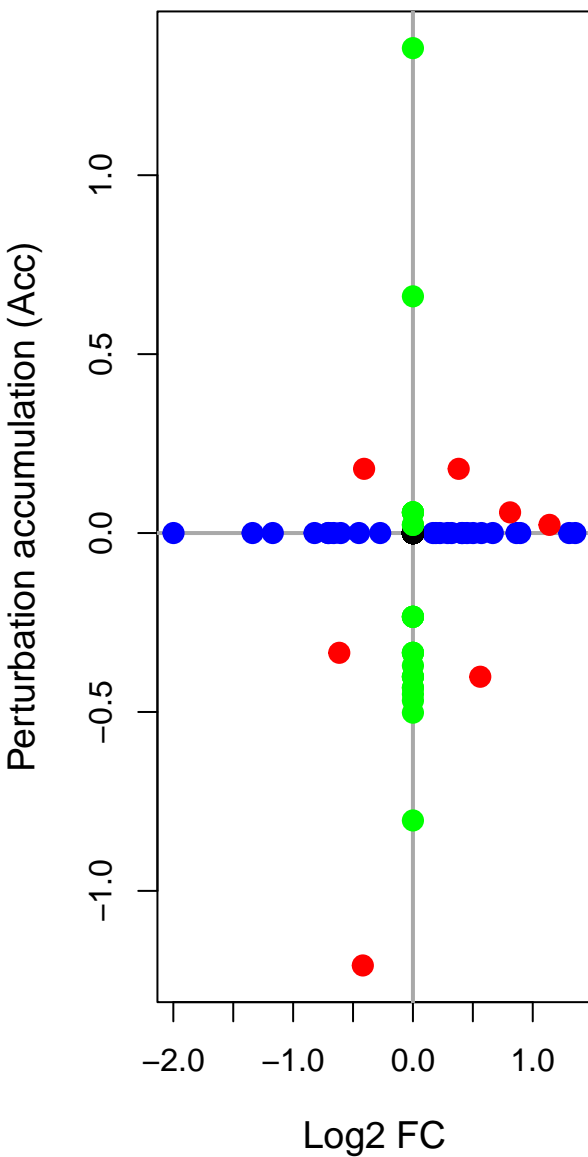
pathway ID=05160



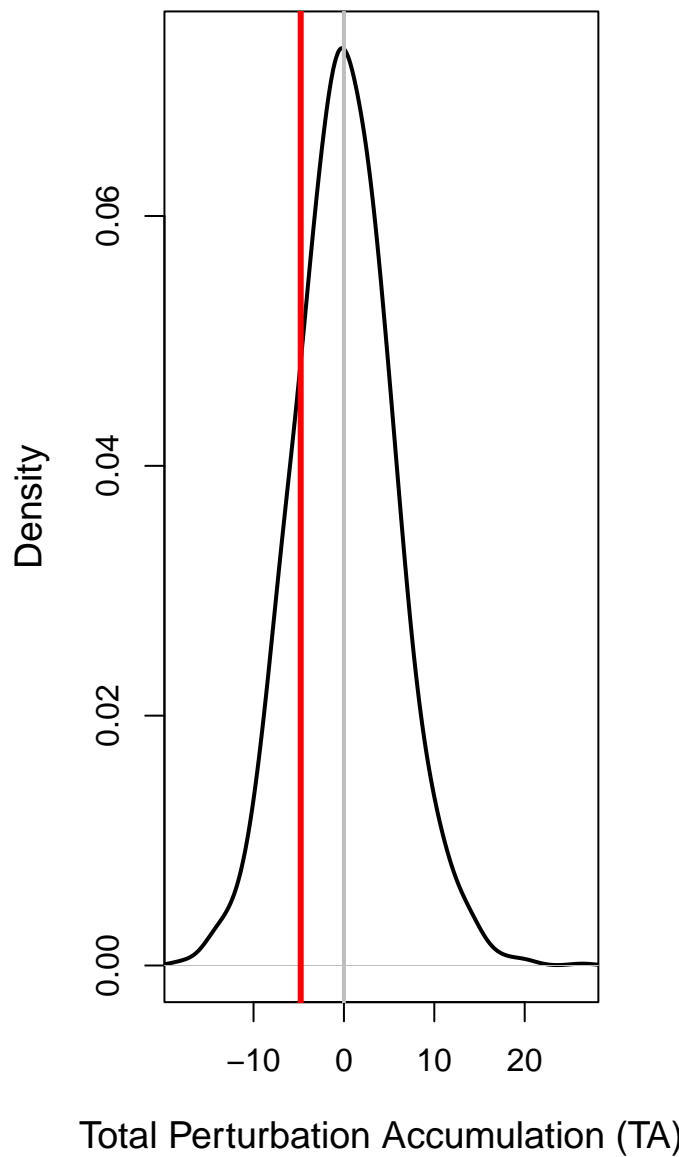
pathway ID=05160 P PERT=0.032



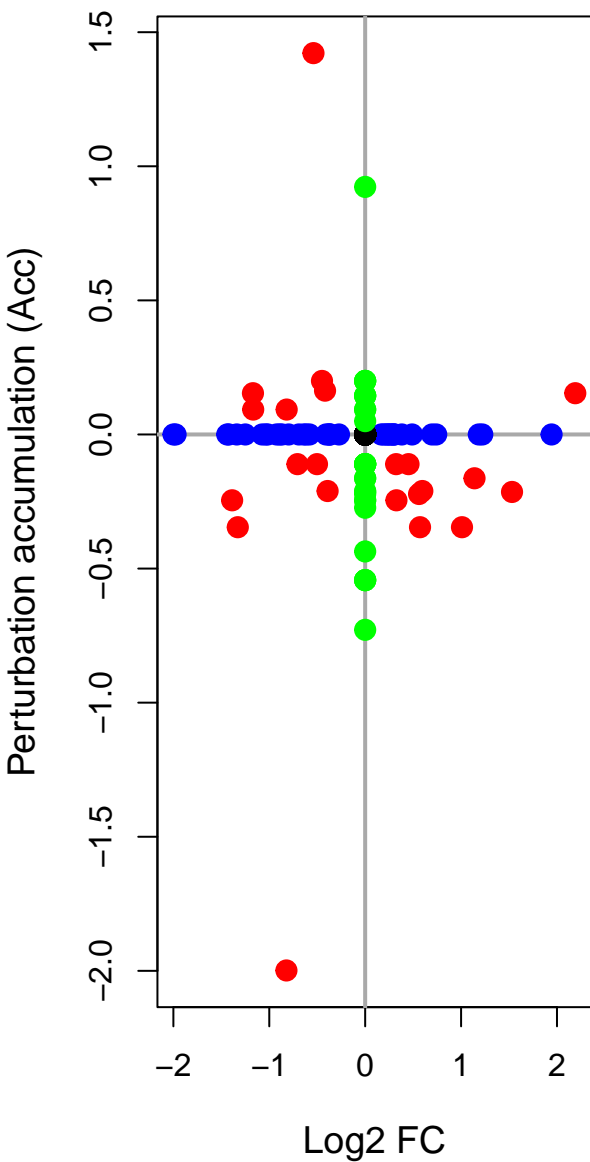
pathway ID=05162



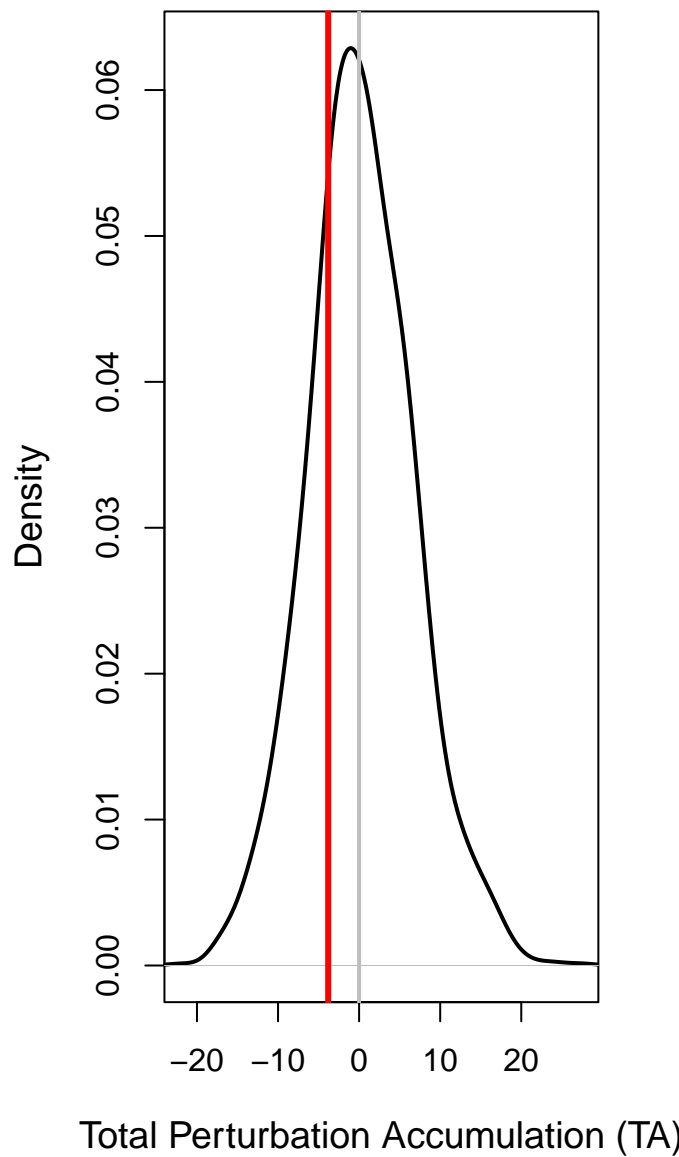
pathway ID=05162 P PERT=0.37



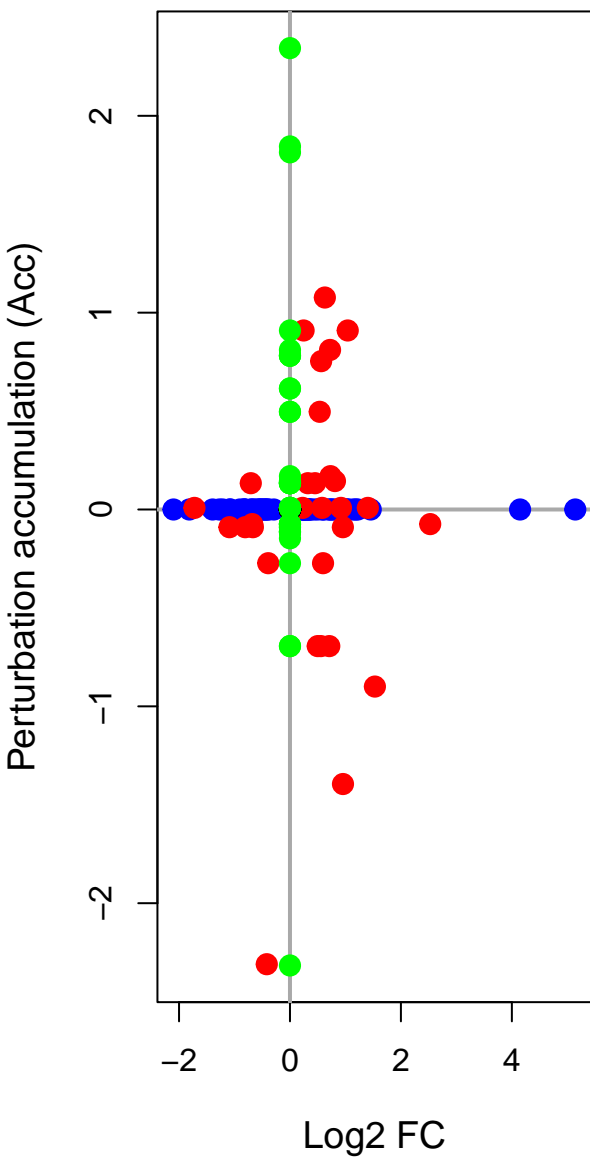
pathway ID=05164



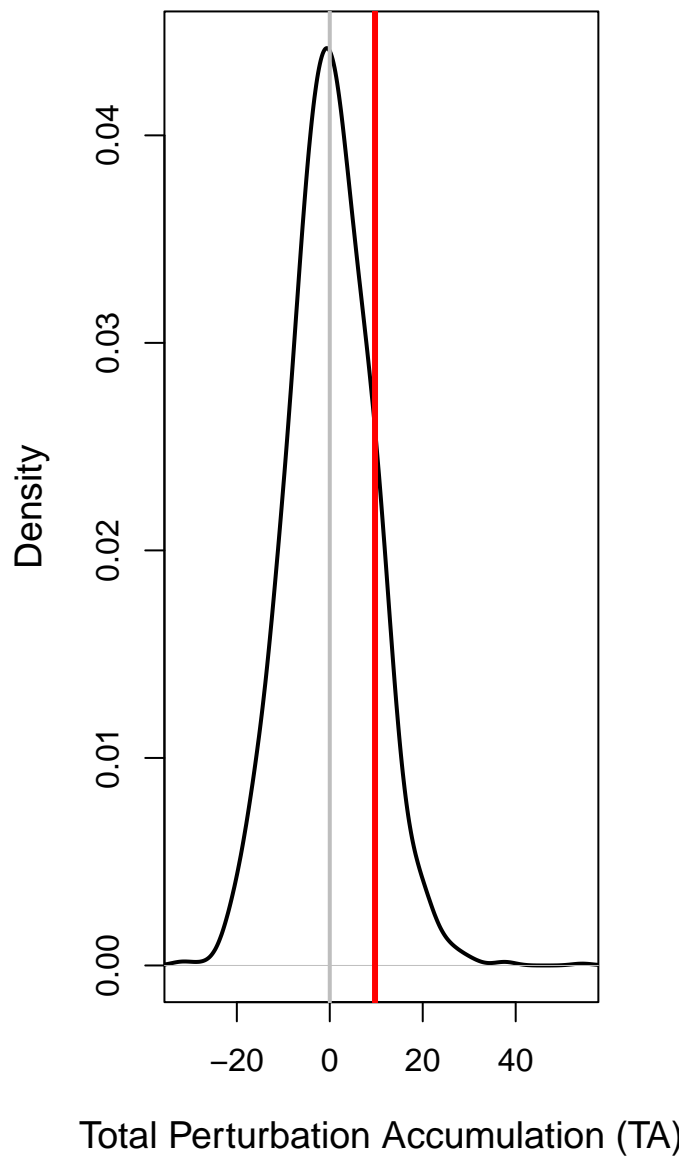
pathway ID=05164 P PERT=0.511



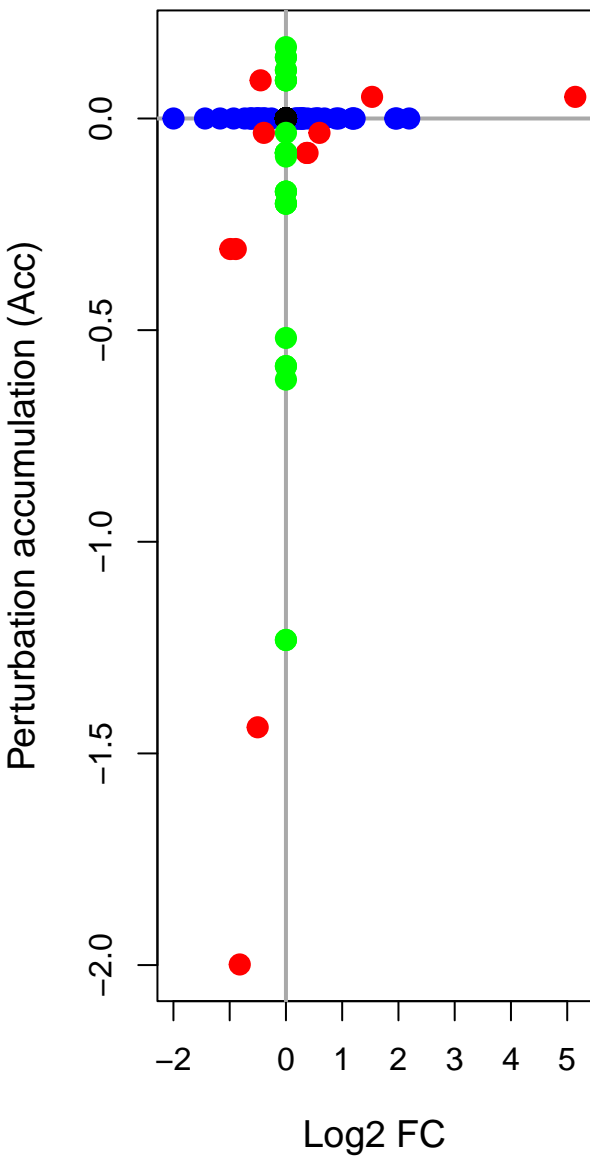
pathway ID=05166



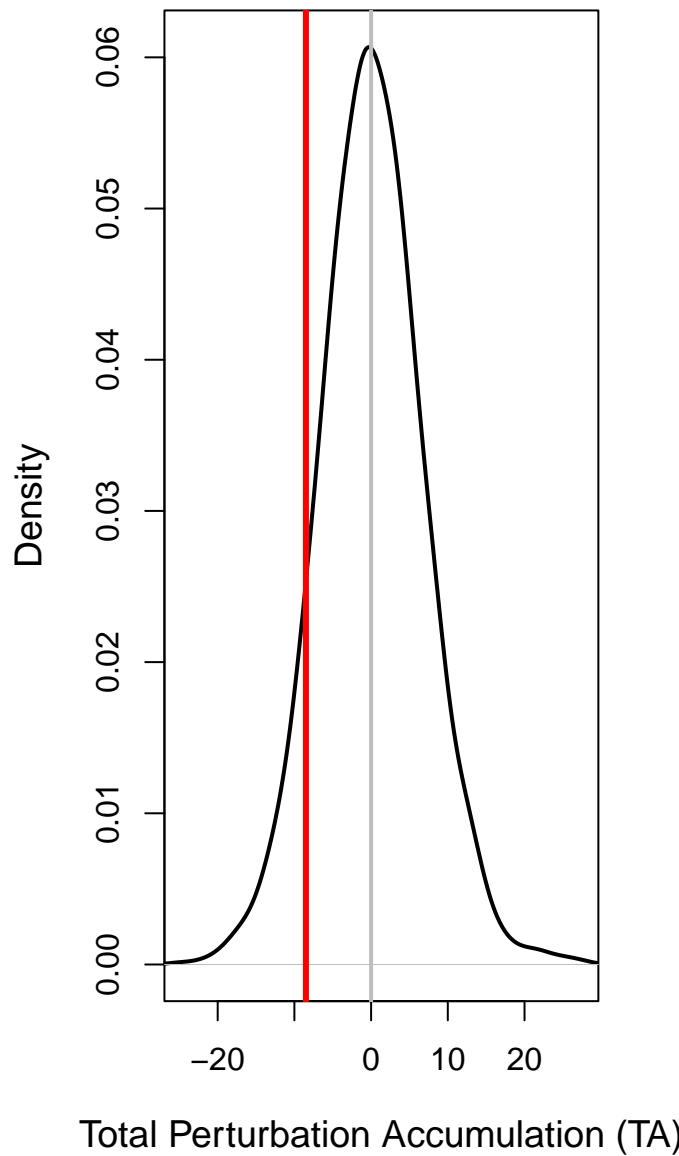
pathway ID=05166 P PERT=0.287



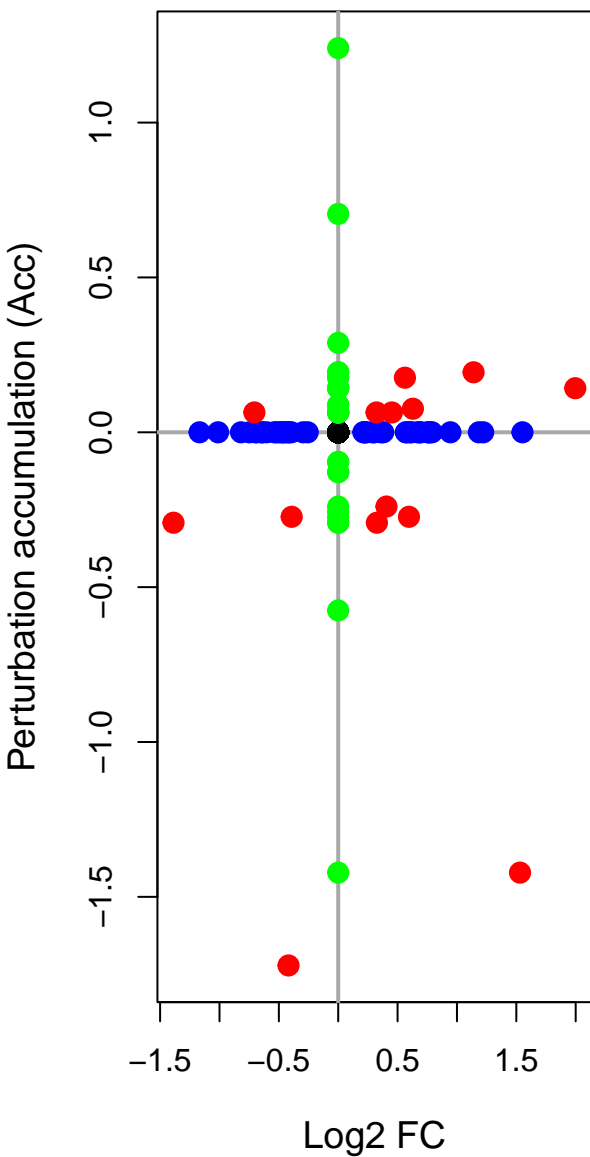
pathway ID=05168



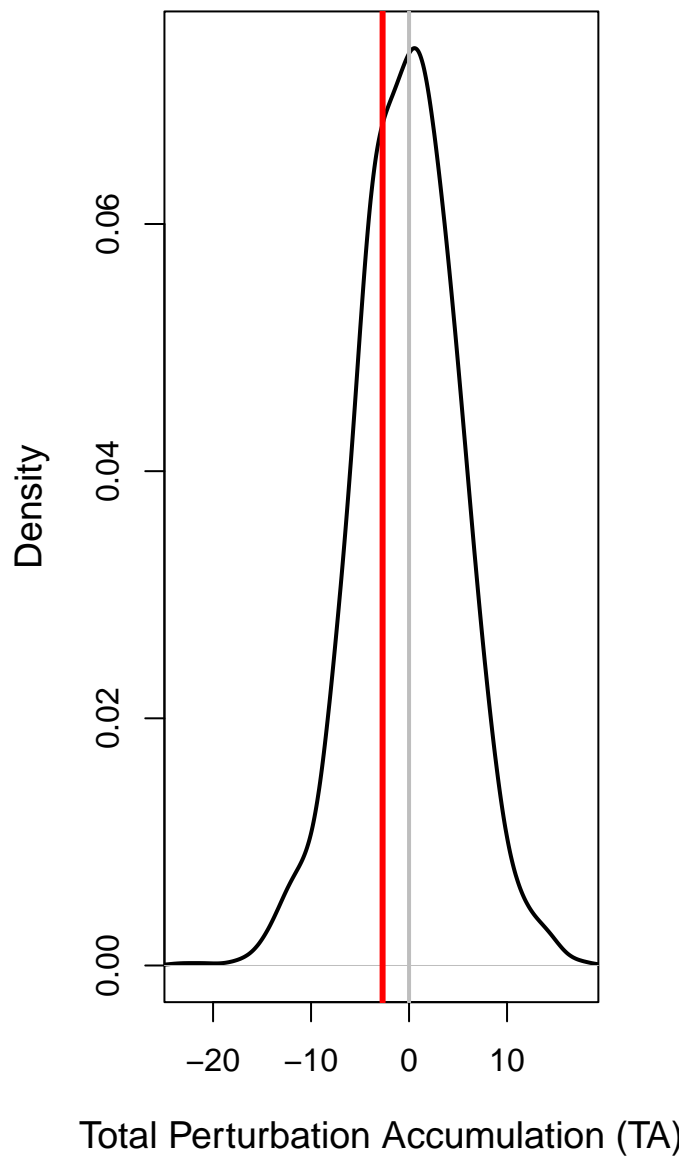
pathway ID=05168 P PERT=0.181



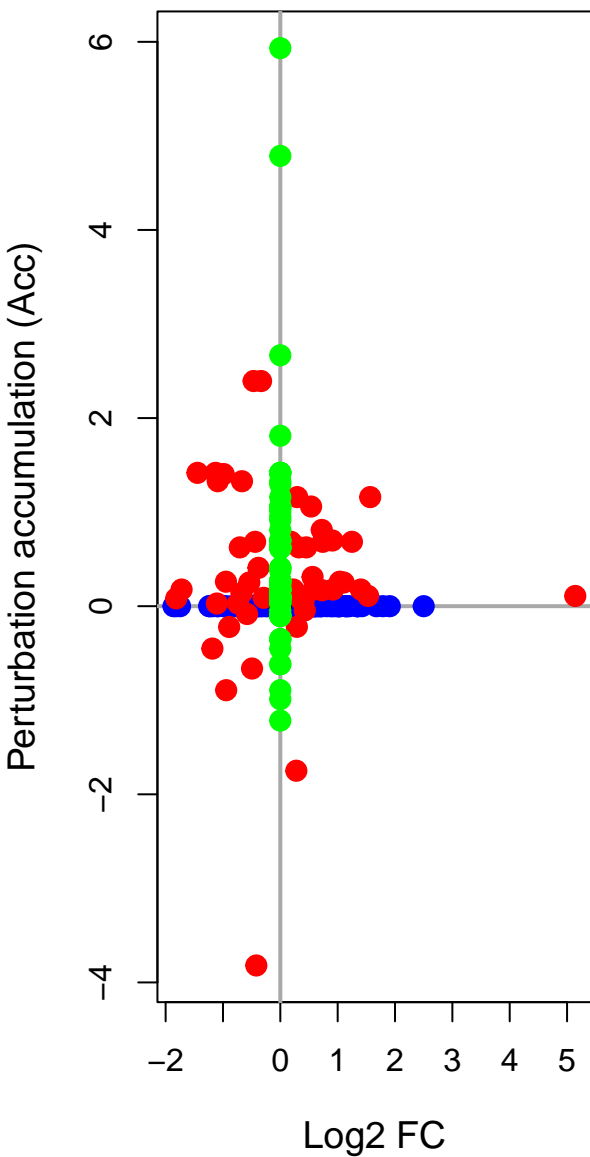
pathway ID=05169



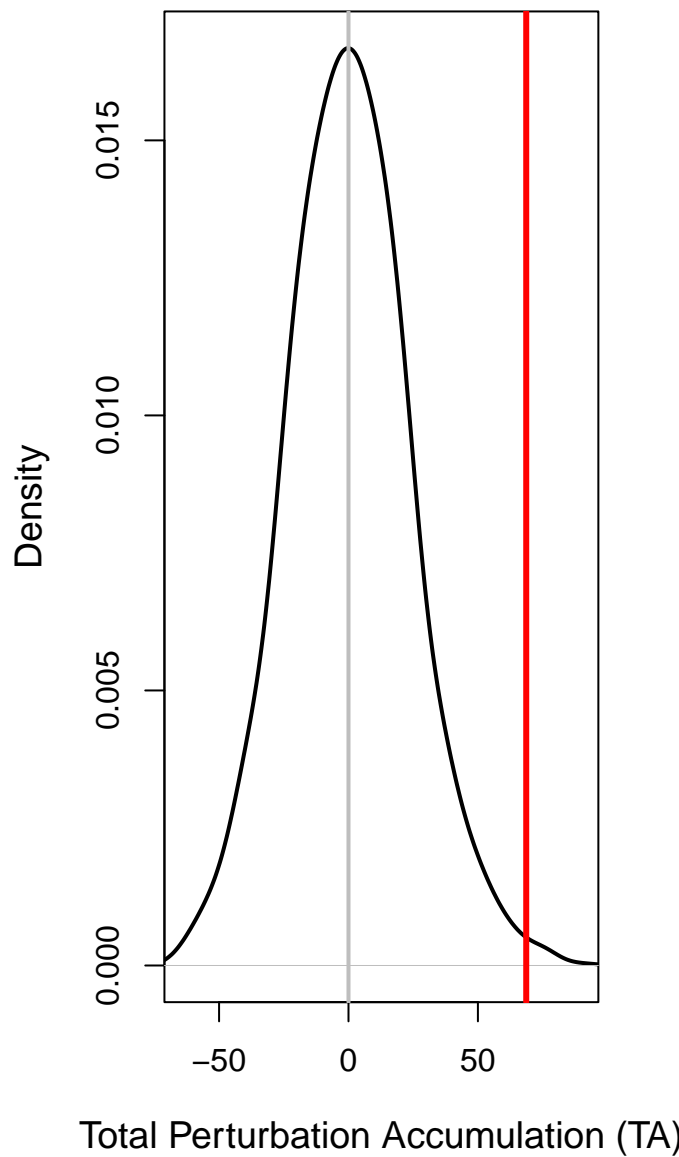
pathway ID=05169 P PERT=0.625



pathway ID=05200

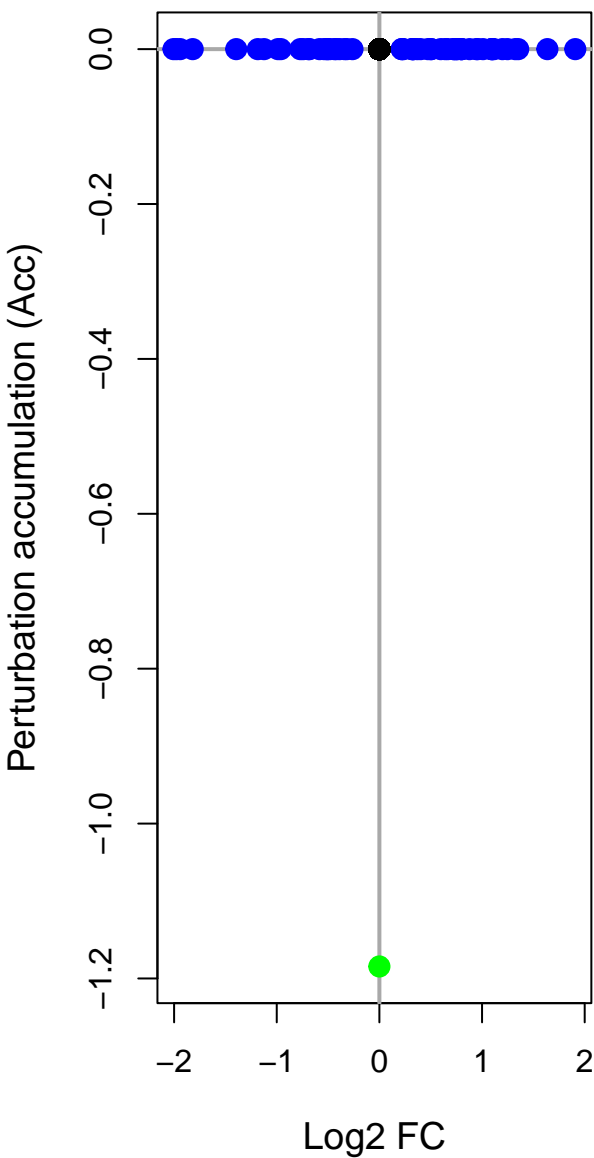


pathway ID=05200 P PERT=0.009

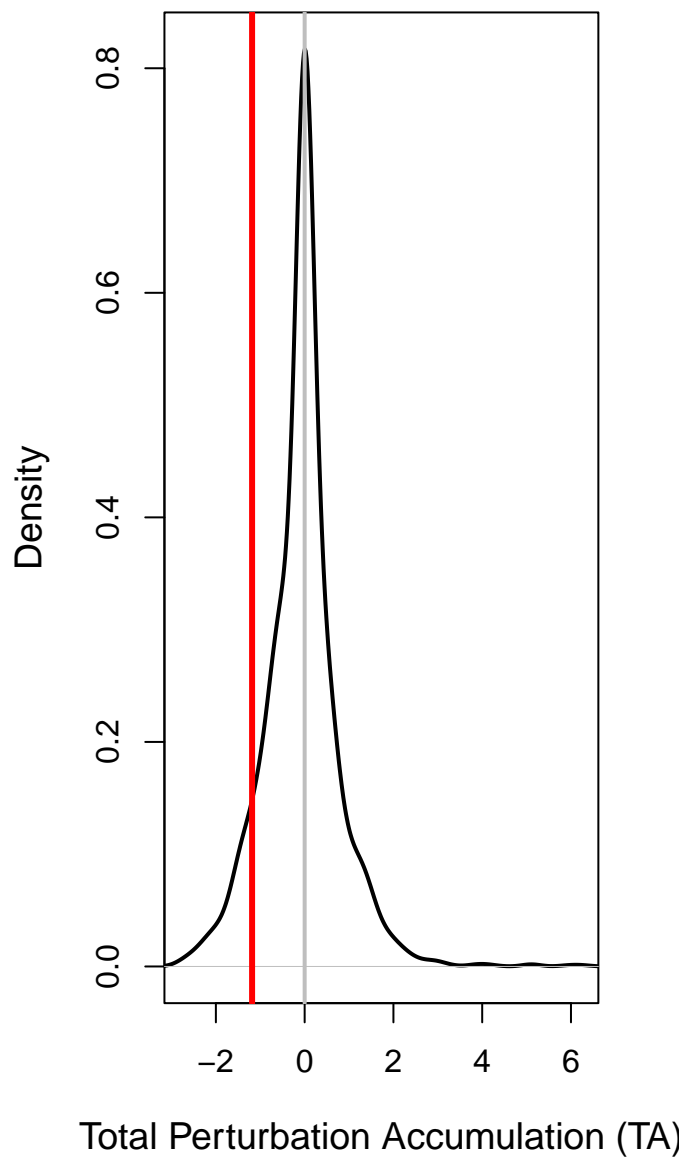




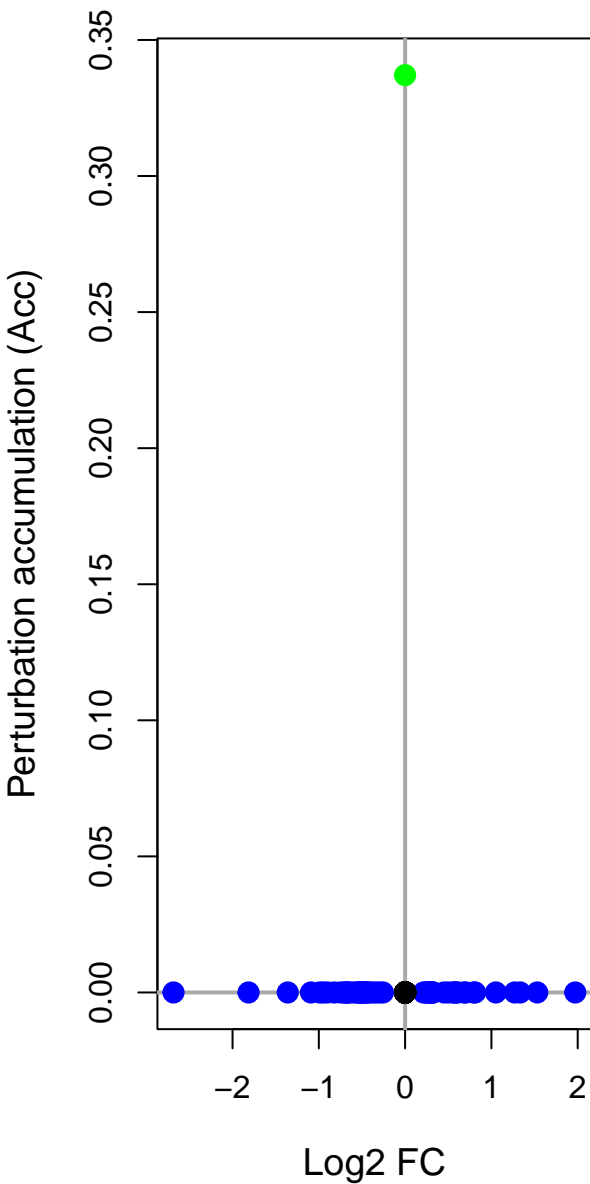
pathway ID=05202



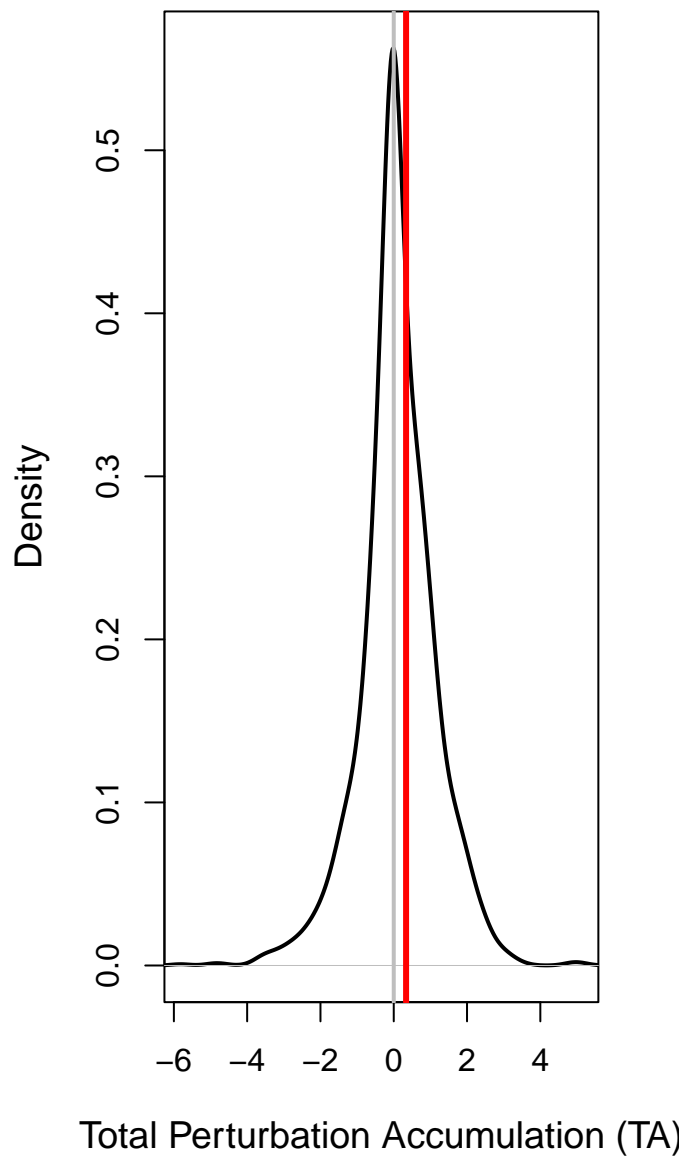
pathway ID=05202 P PERT=0.164



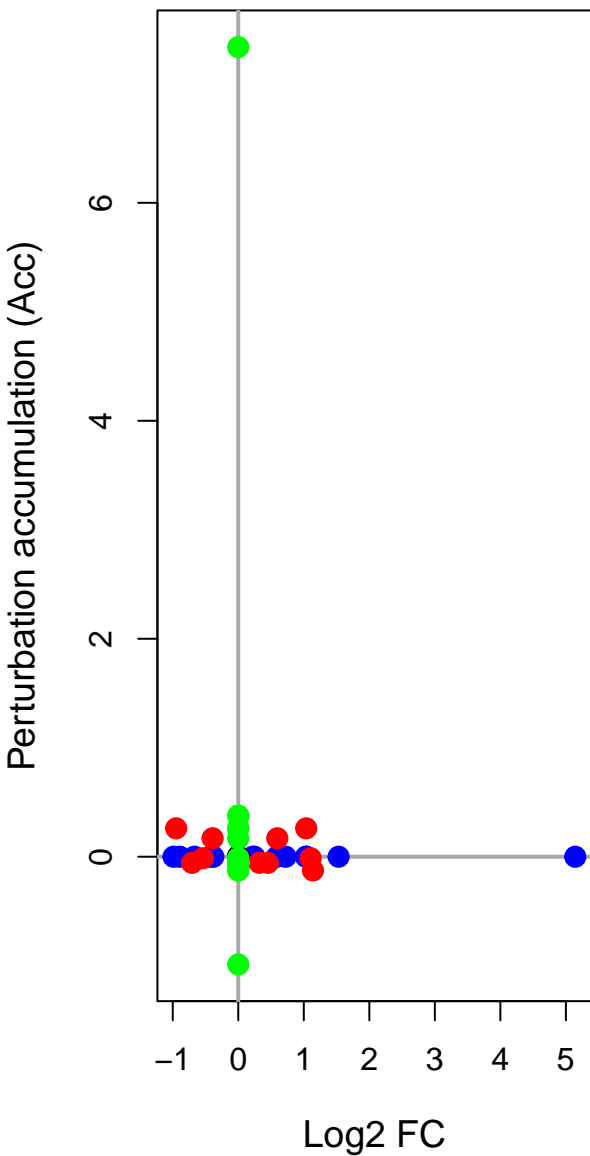
pathway ID=05203



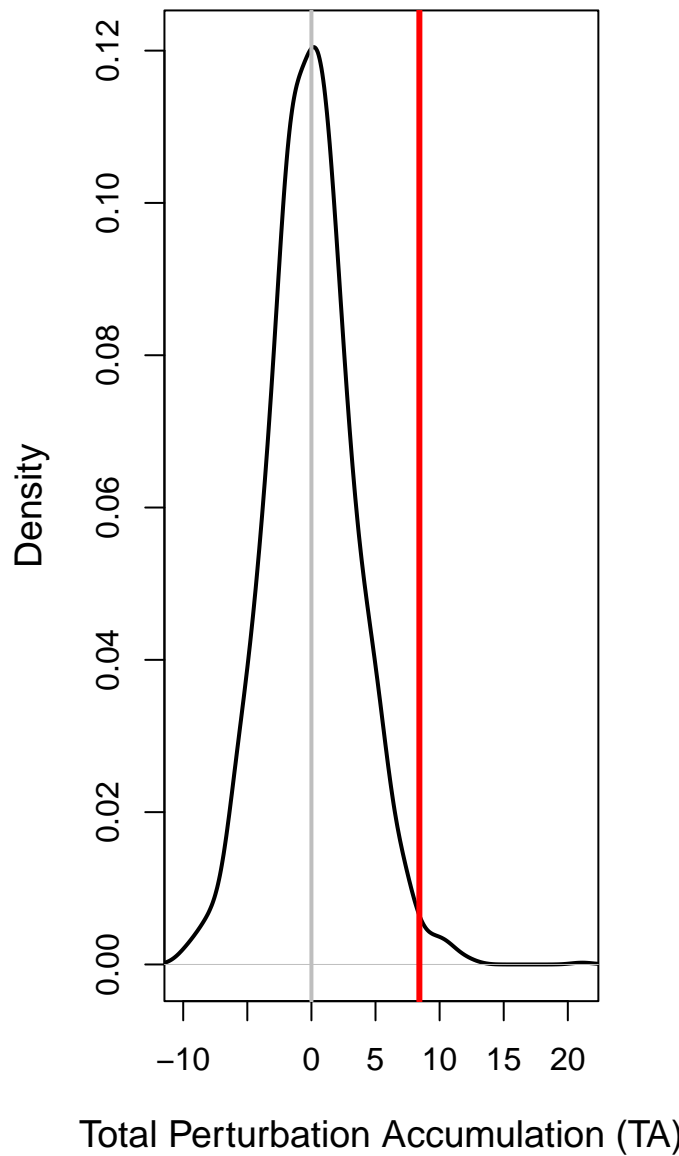
pathway ID=05203 P PERT=0.742



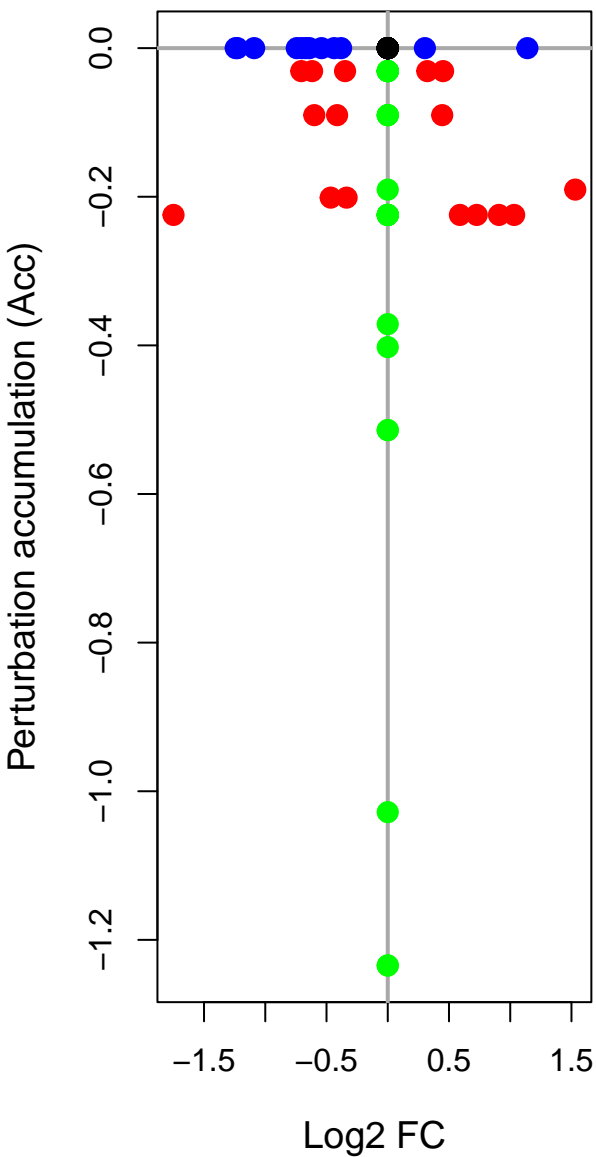
pathway ID=05210



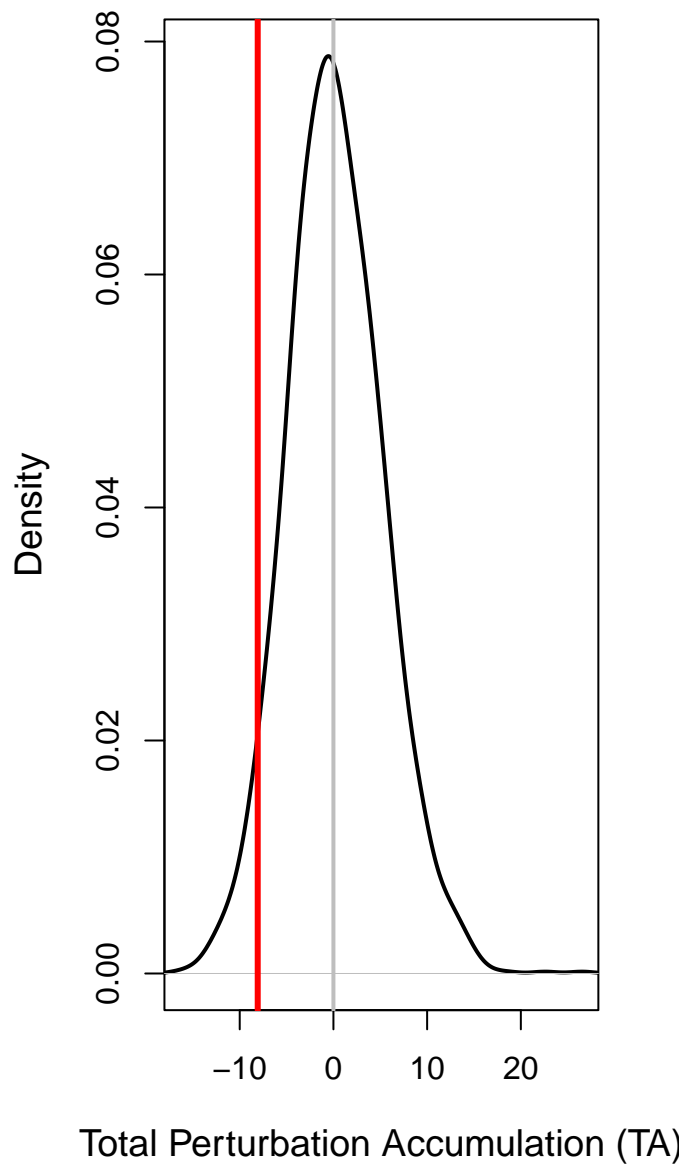
pathway ID=05210 P PERT=0.025



pathway ID=05211



pathway ID=05211 P PERT=0.089

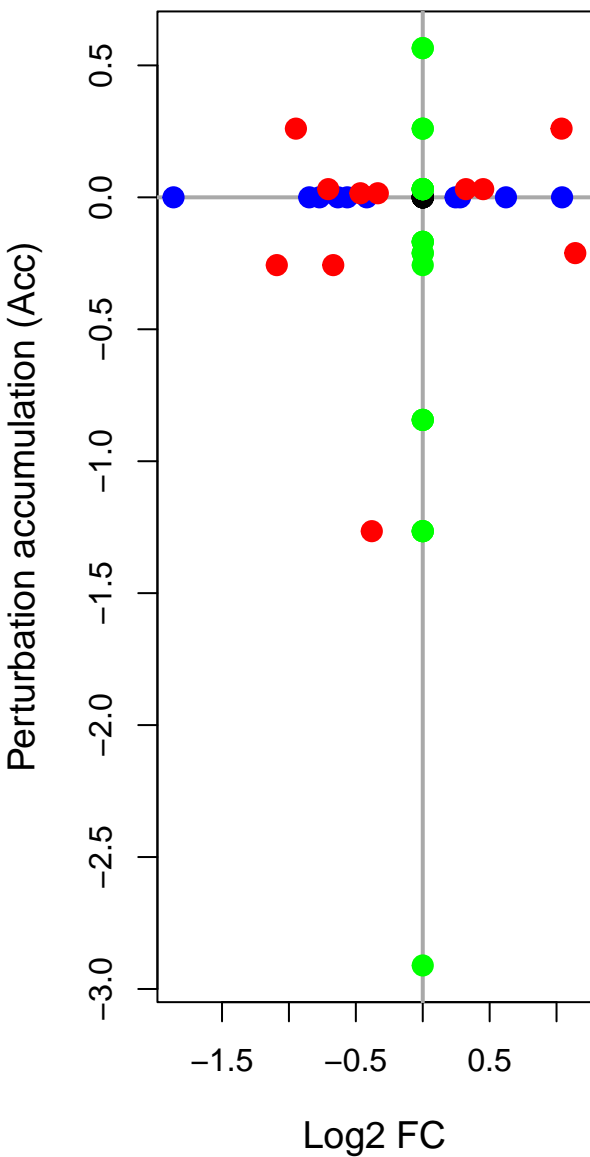


-1.5      -0.5      0.5

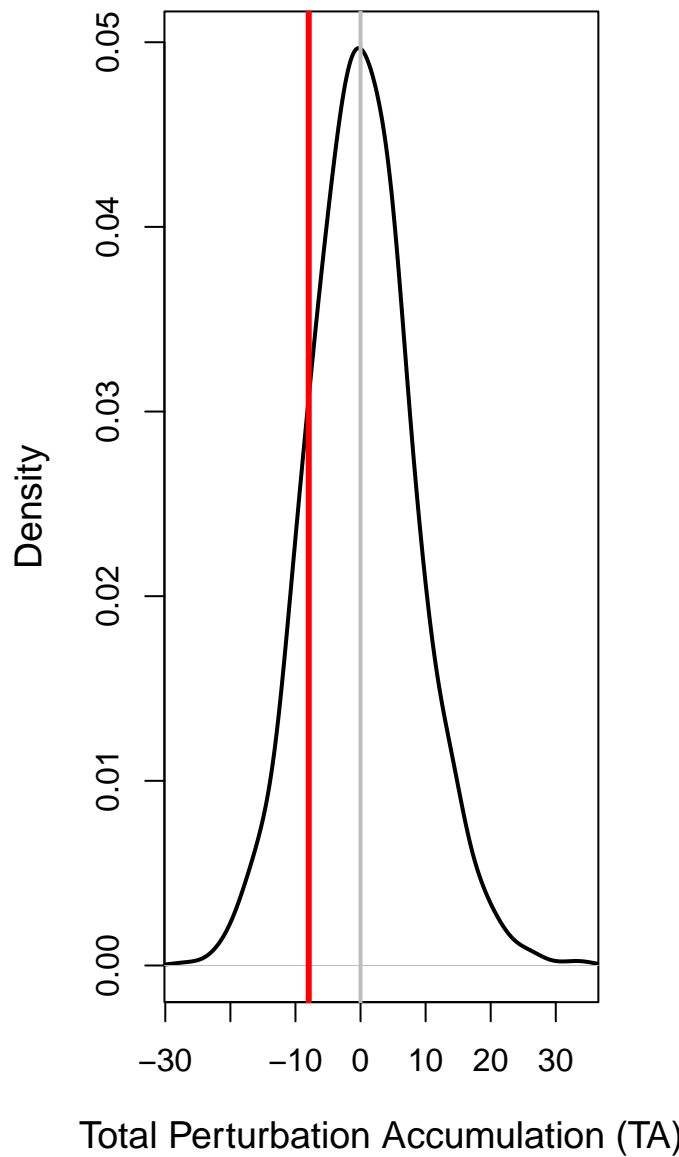
The figure shows a probability density function (PDF) as a black curve. The x-axis represents the value of the random variable, and the y-axis represents the probability density. A vertical grey line marks the mean of the distribution, and a vertical red line marks the mode. The mode is located to the right of the mean, indicating a right-skewed distribution. The peak of the curve is at the mode, with a density of approximately 0.065.

-20   -10   0   10   20

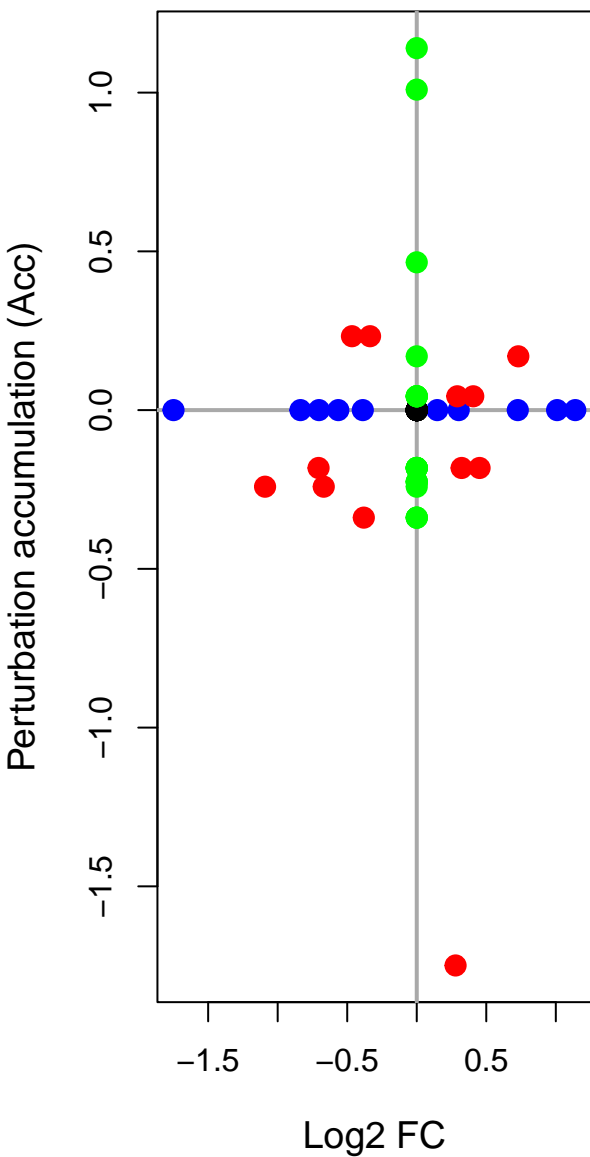
pathway ID=05213



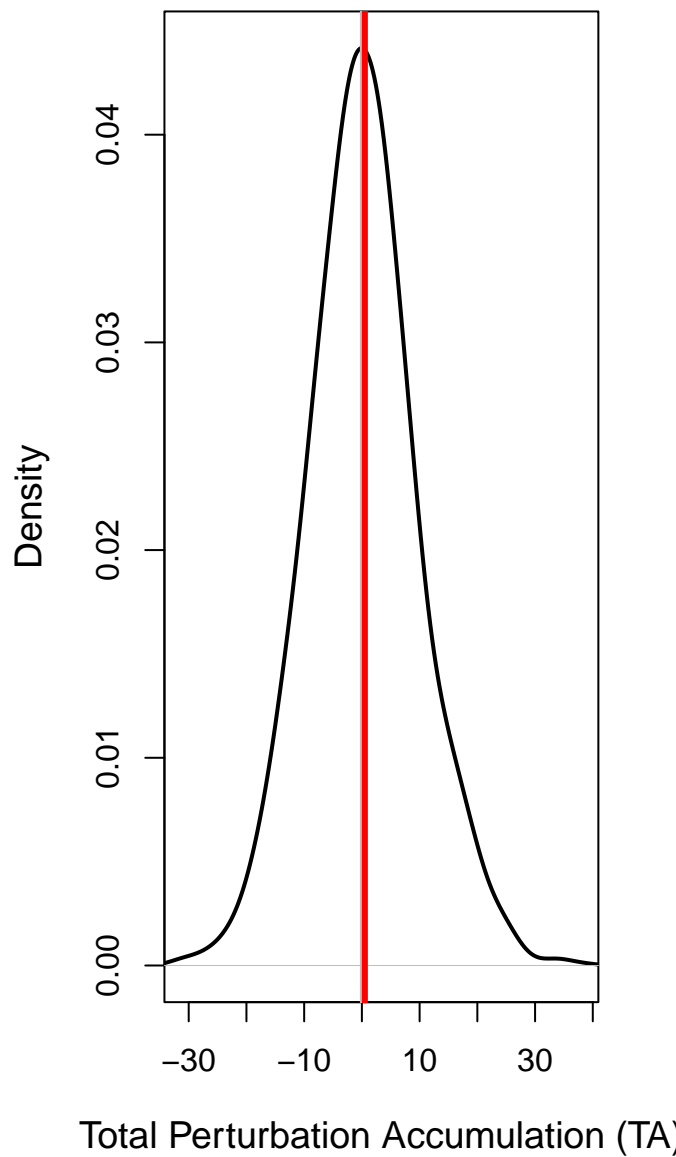
pathway ID=05213 P PERT=0.295



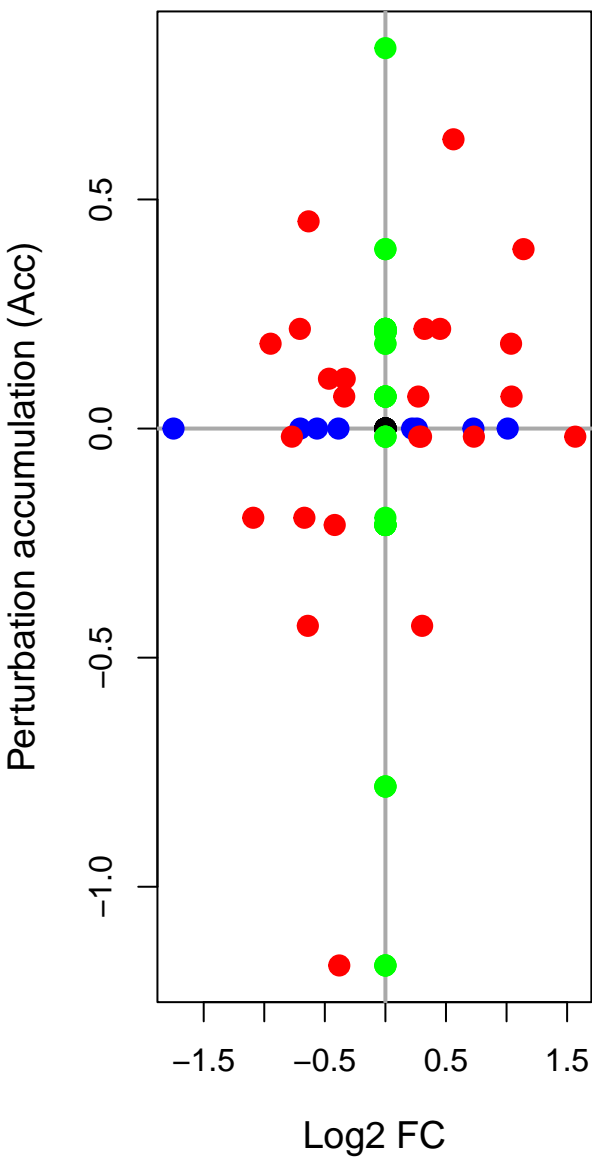
pathway ID=05214



pathway ID=05214 P PERT=0.946

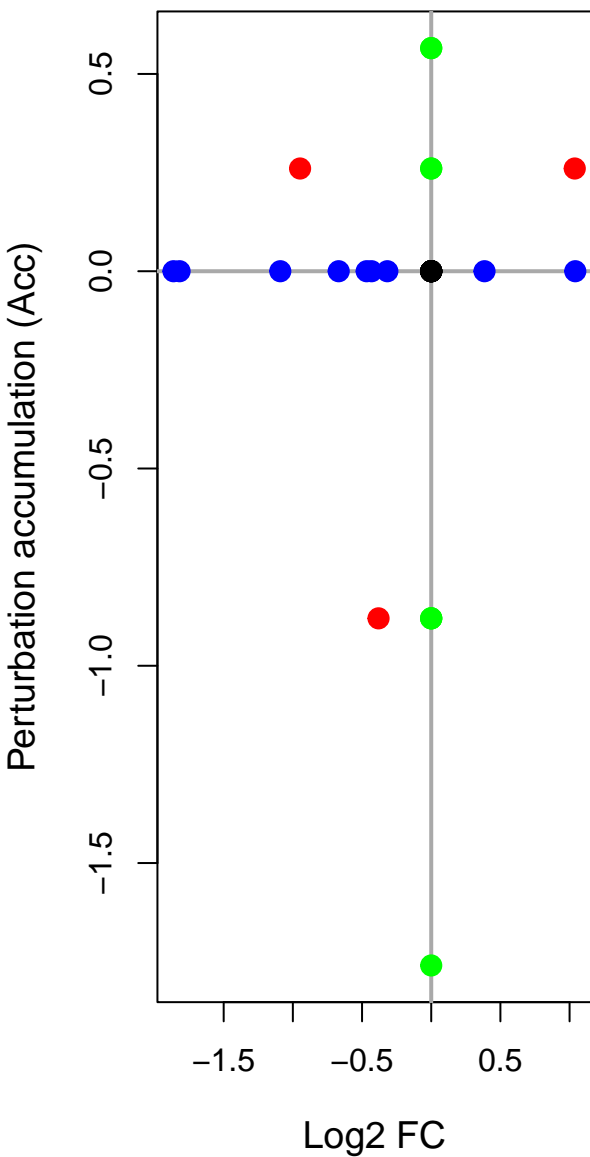


pathway ID=05215

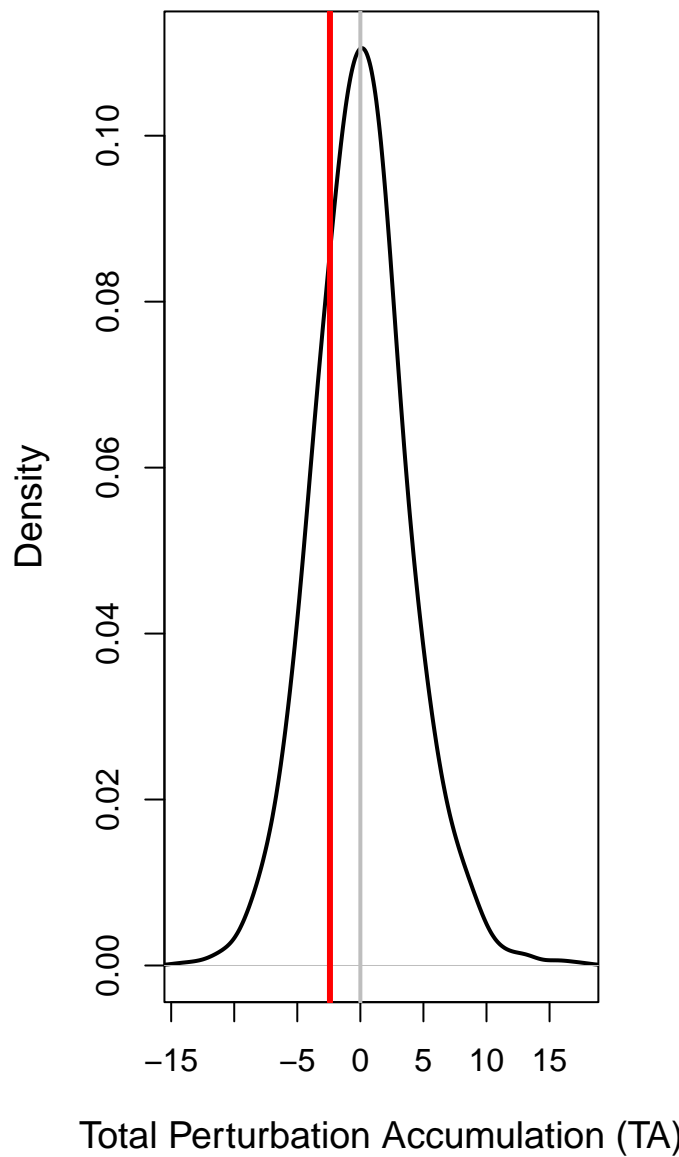




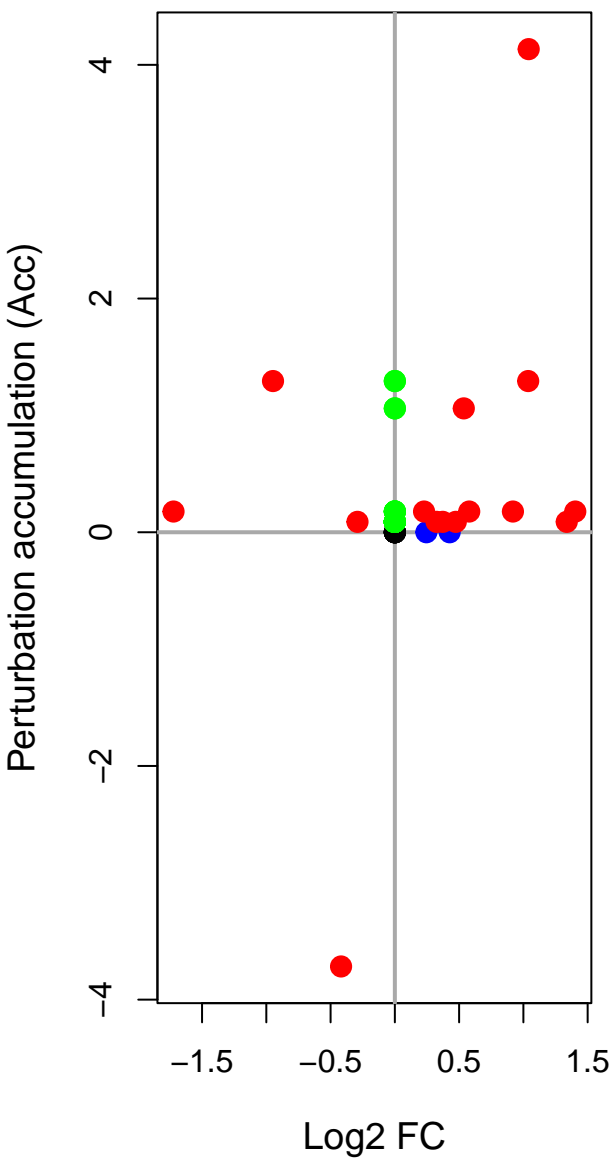
pathway ID=05216



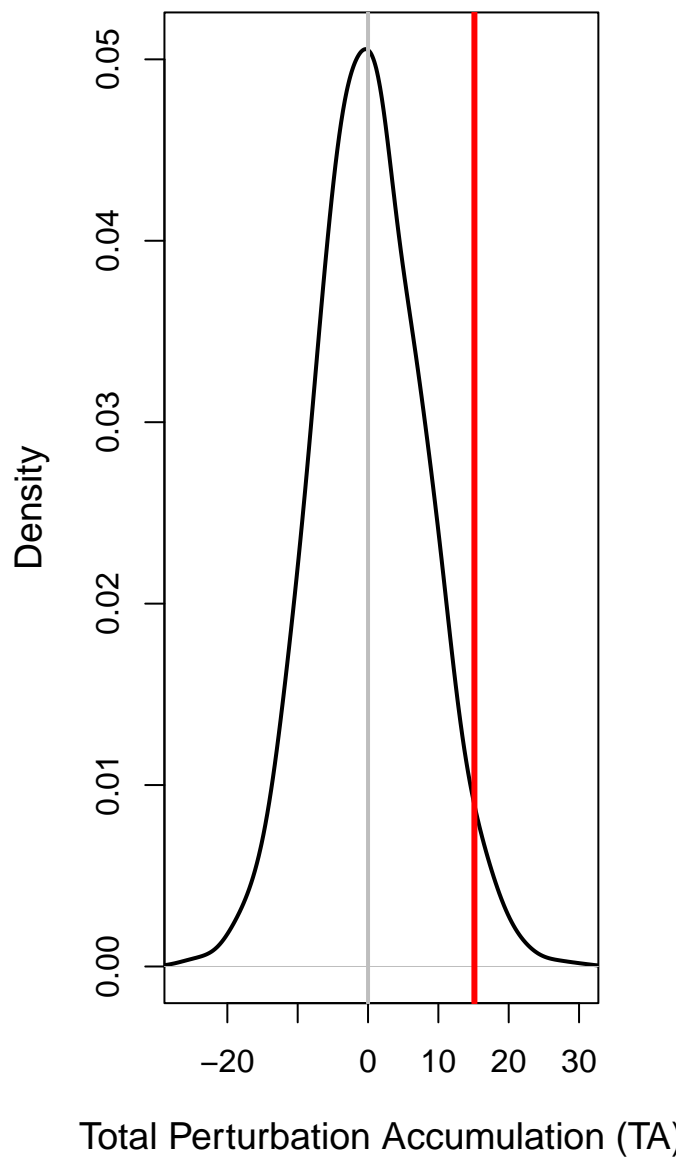
pathway ID=05216 P PERT=0.495



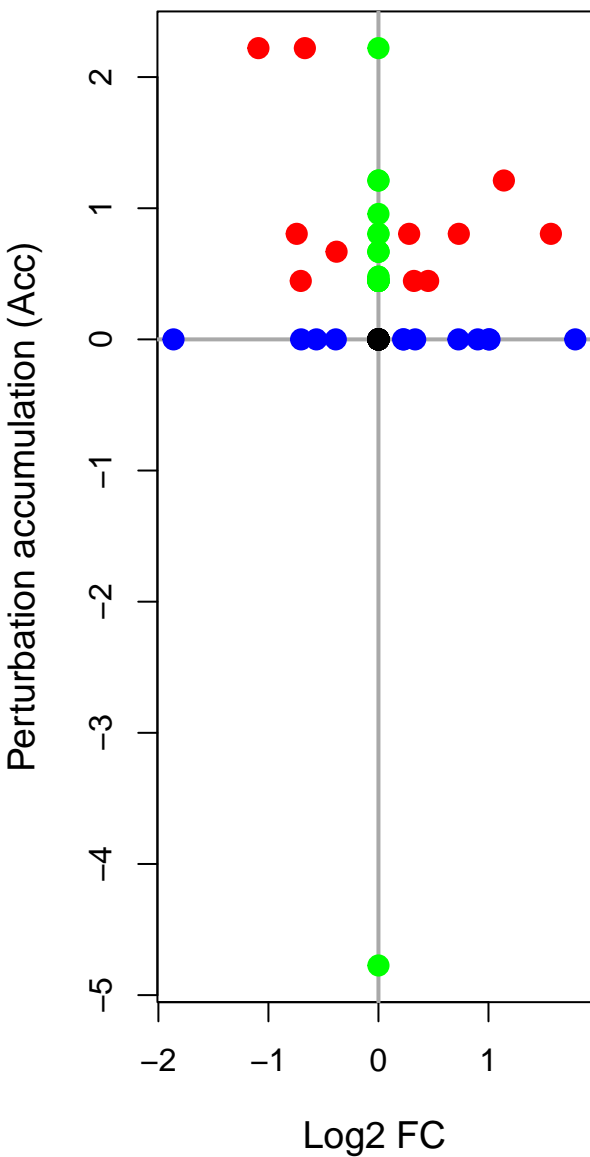
pathway ID=05217



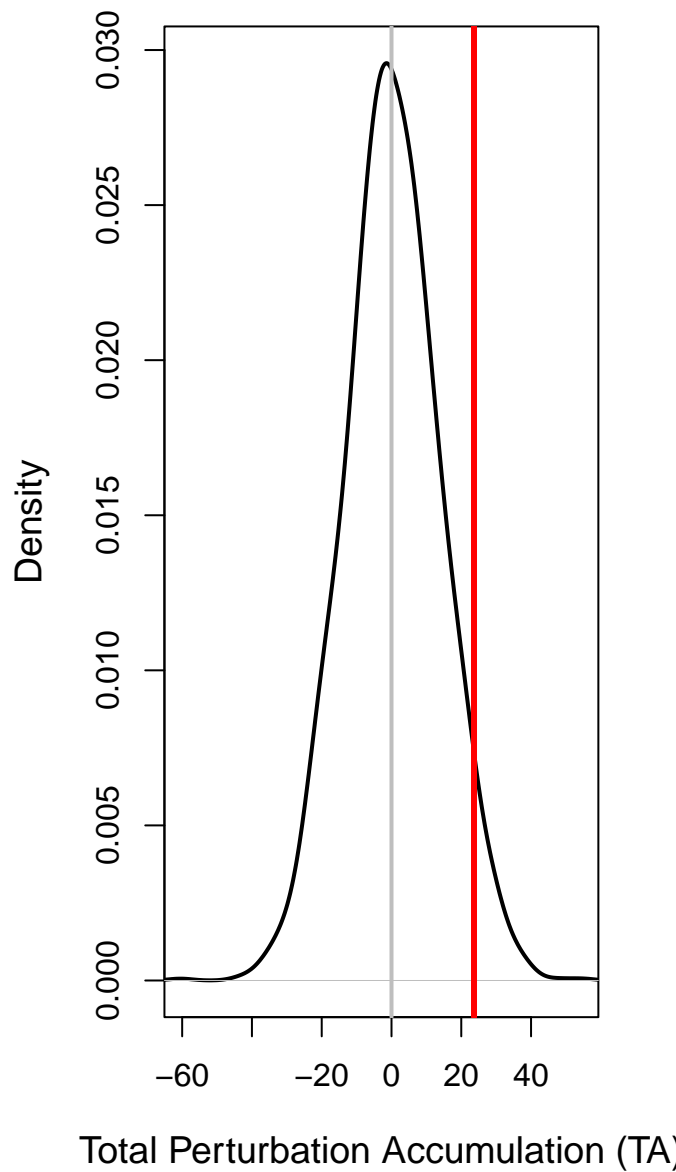
pathway ID=05217 P PERT=0.065



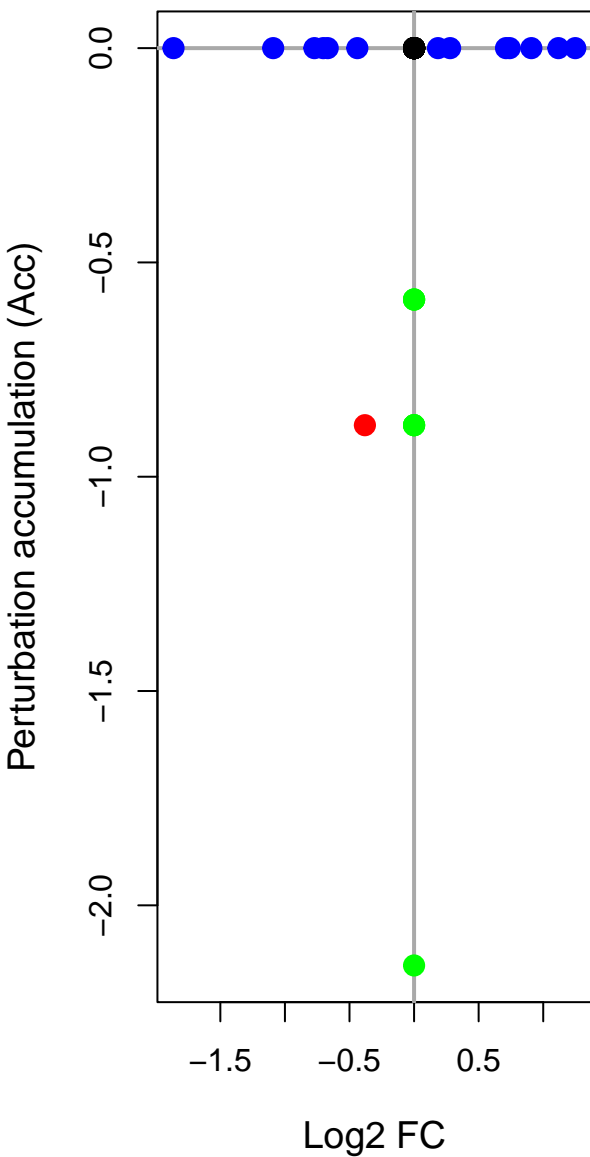
pathway ID=05218



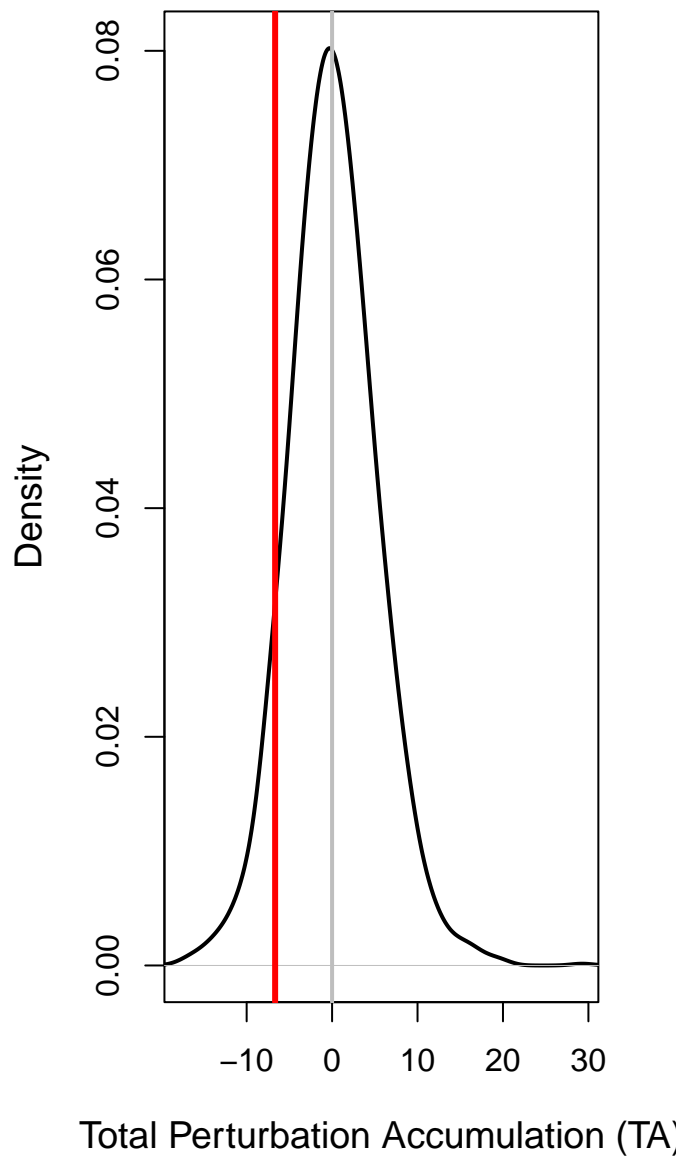
pathway ID=05218 P PERT=0.088



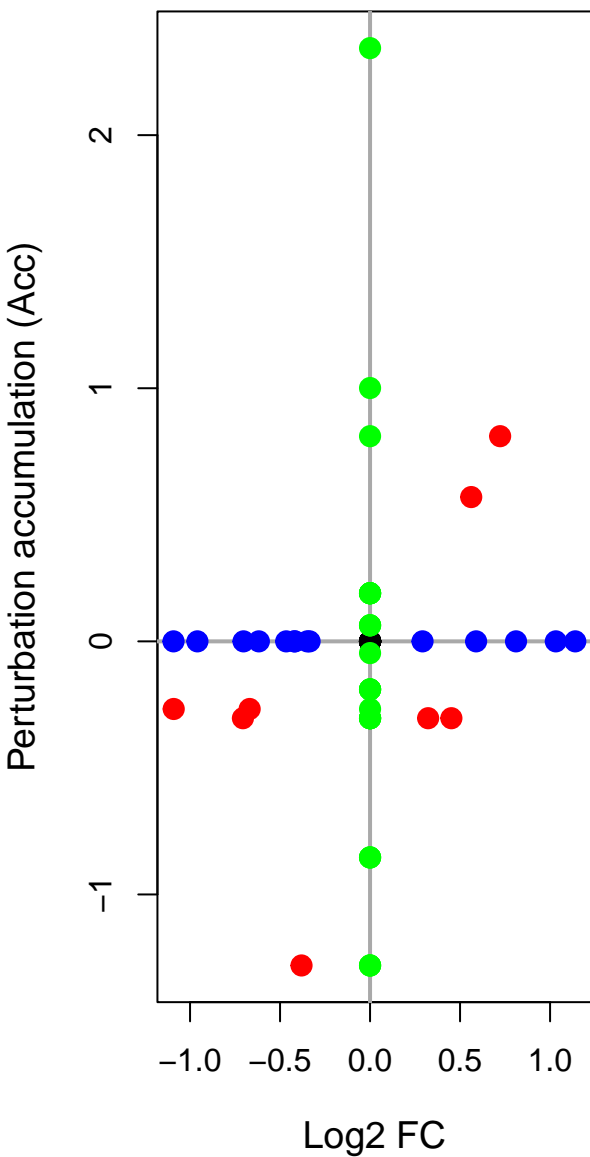
pathway ID=05219



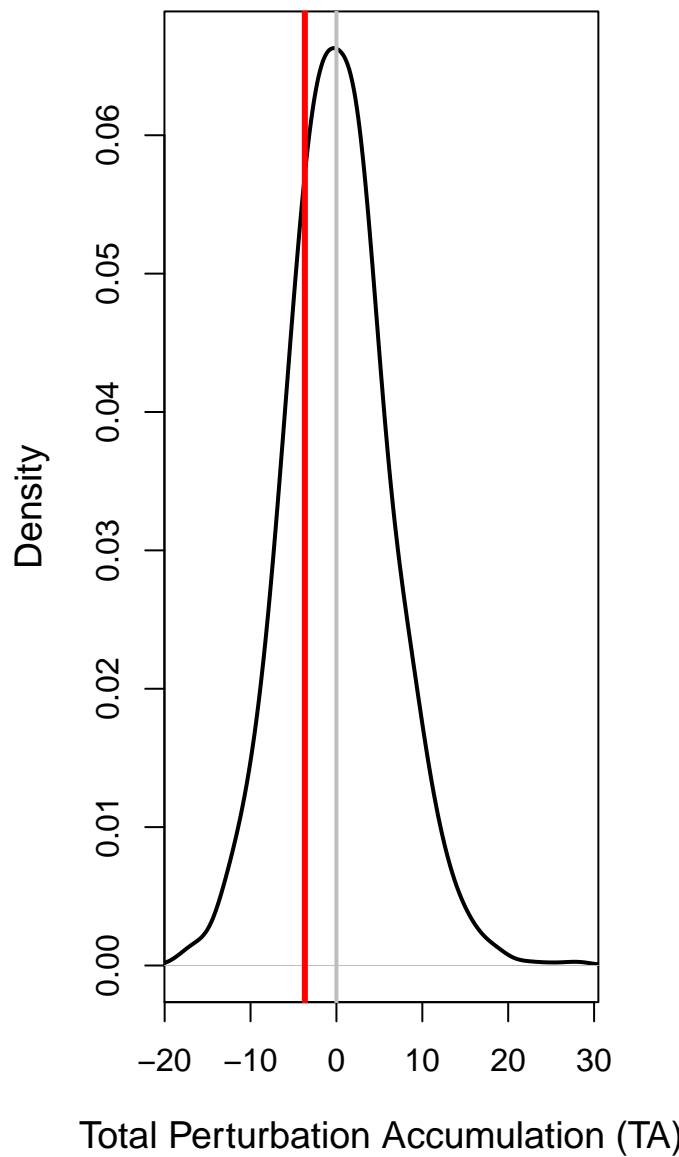
pathway ID=05219 P PERT=0.171



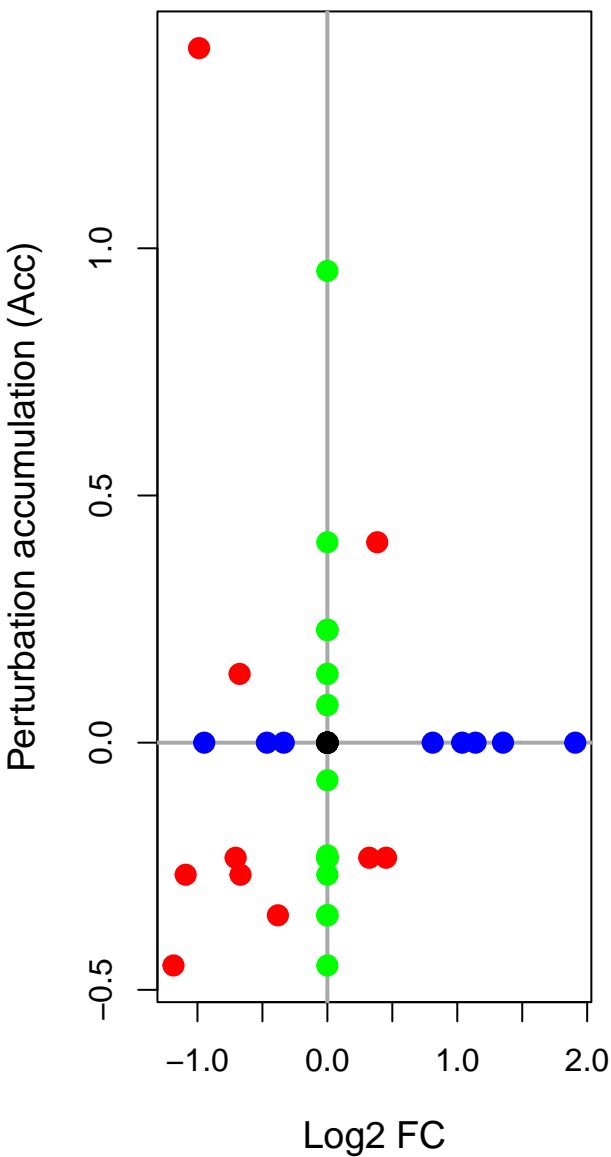
pathway ID=05220



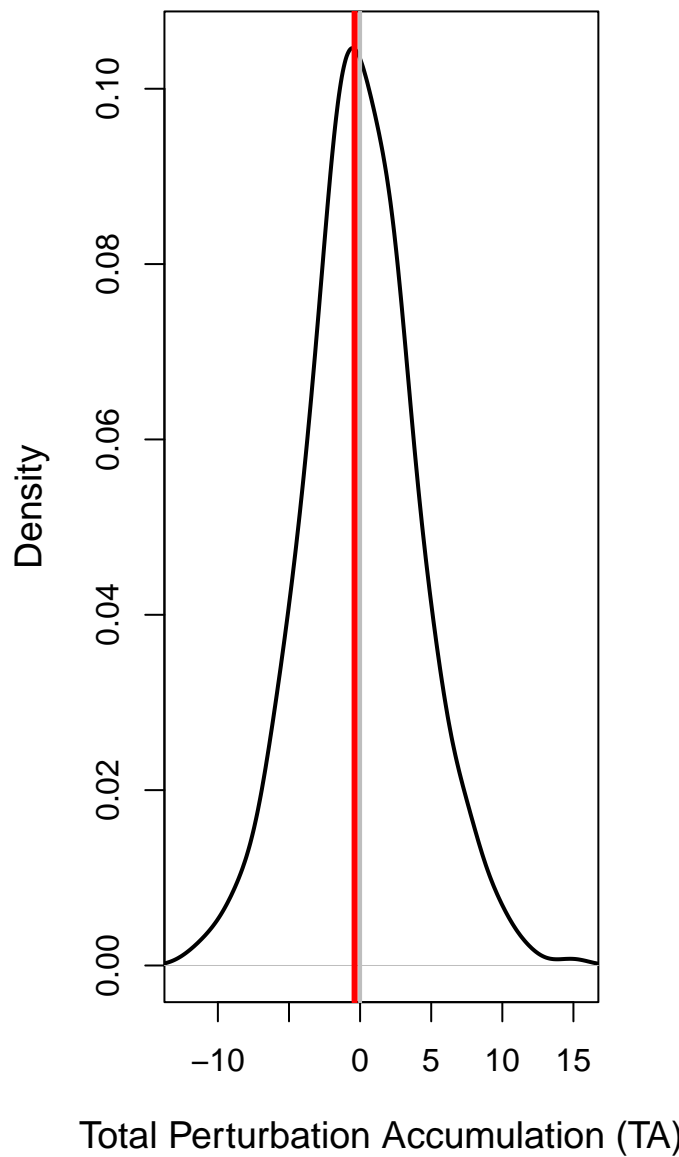
pathway ID=05220 P PERT=0.505



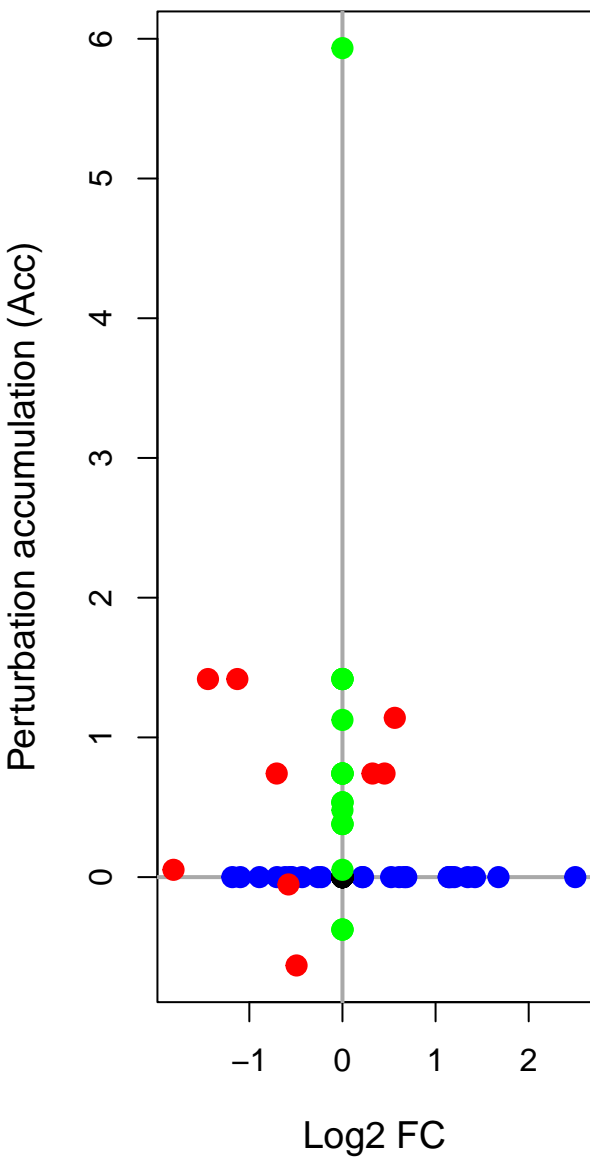
pathway ID=05221



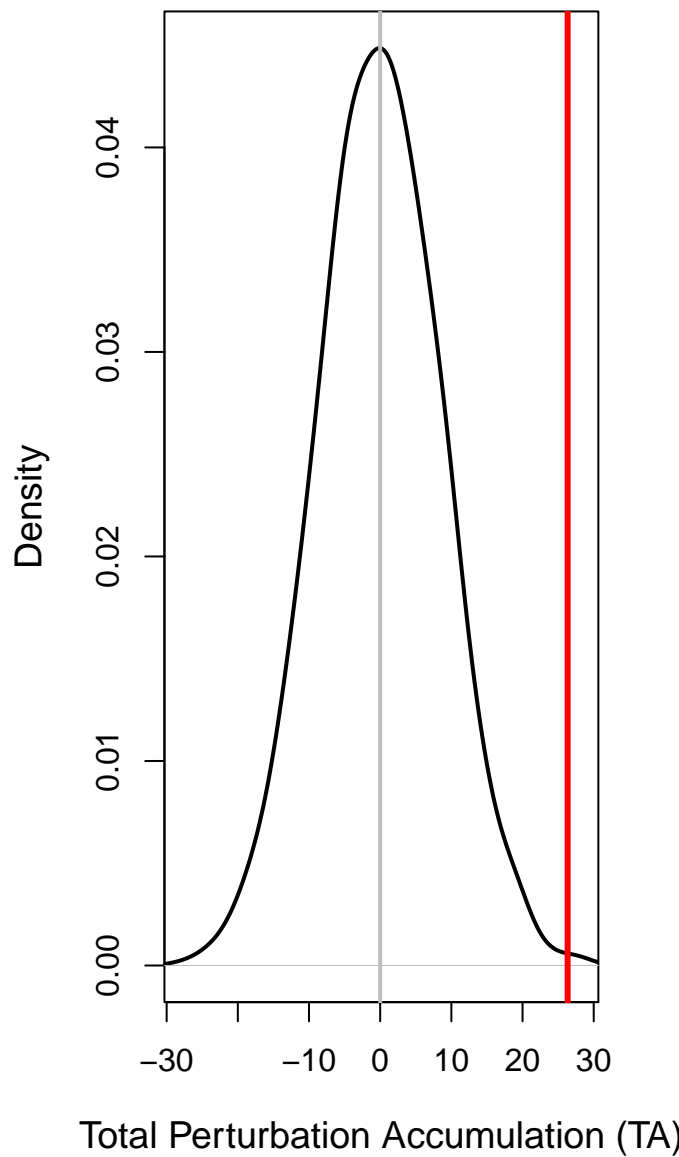
pathway ID=05221 P PERT=0.915



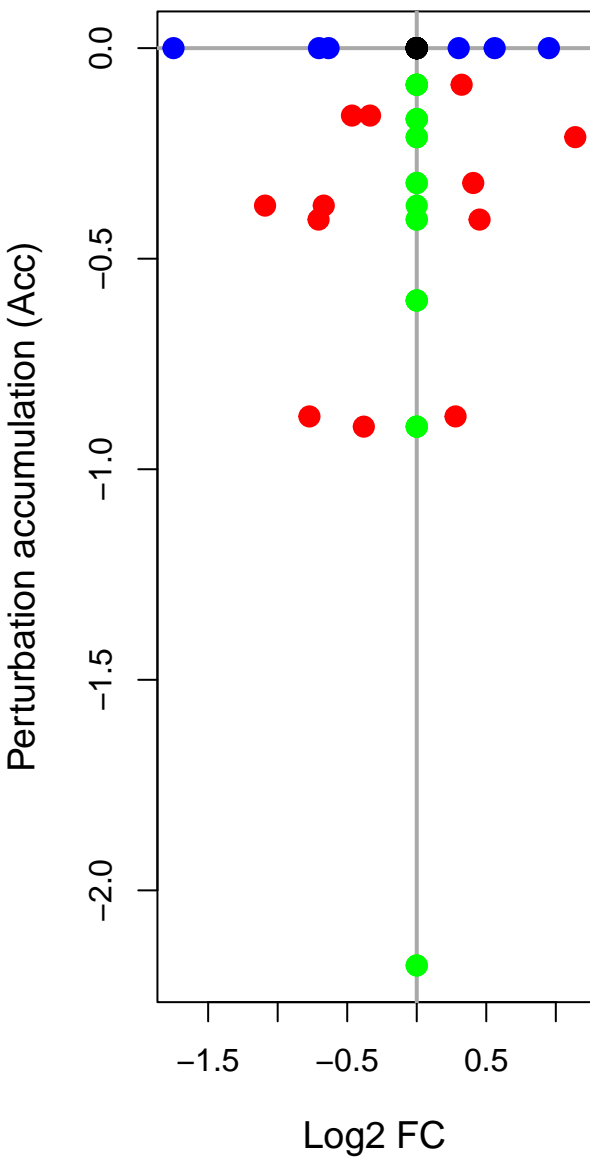
pathway ID=05222



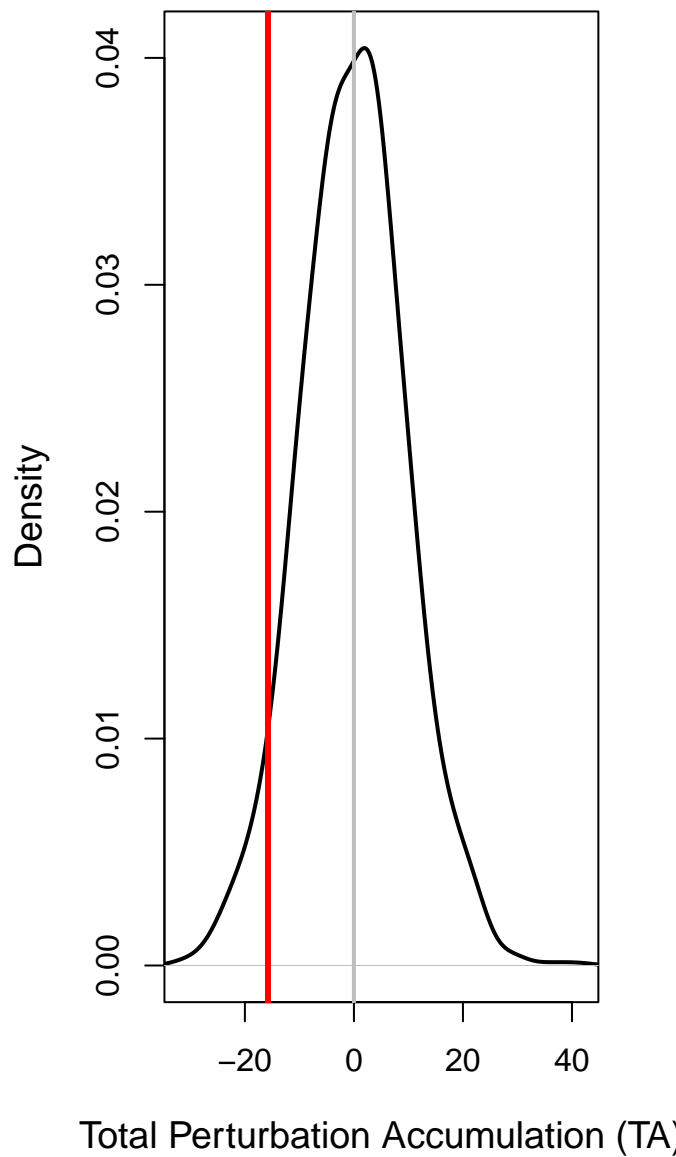
pathway ID=05222 P PERT=0.004



pathway ID=05223

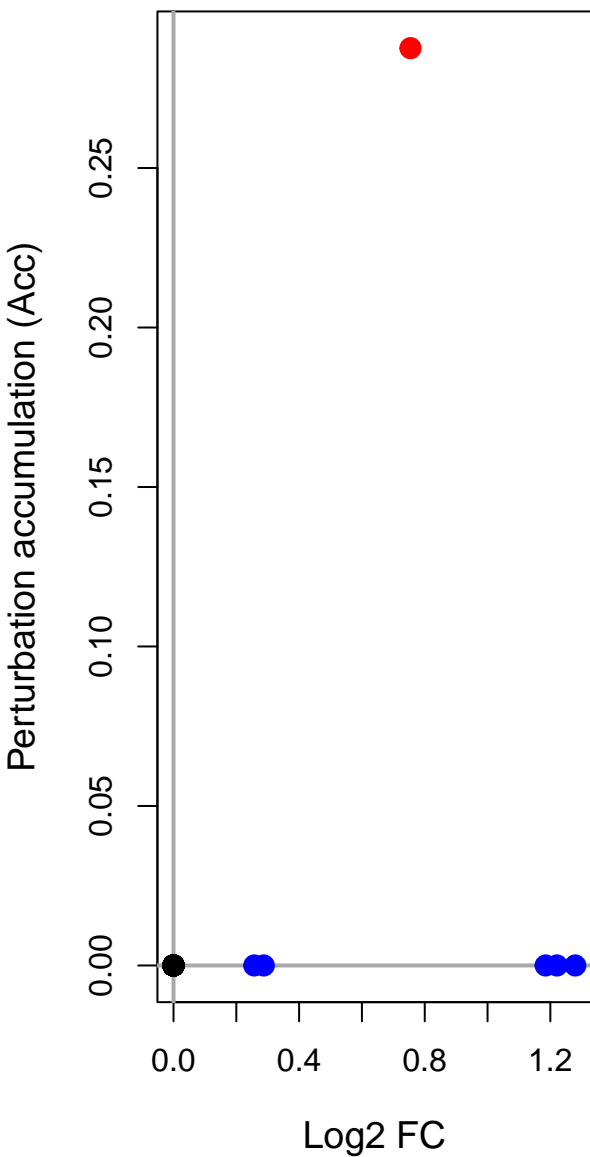


pathway ID=05223 P PERT=0.104

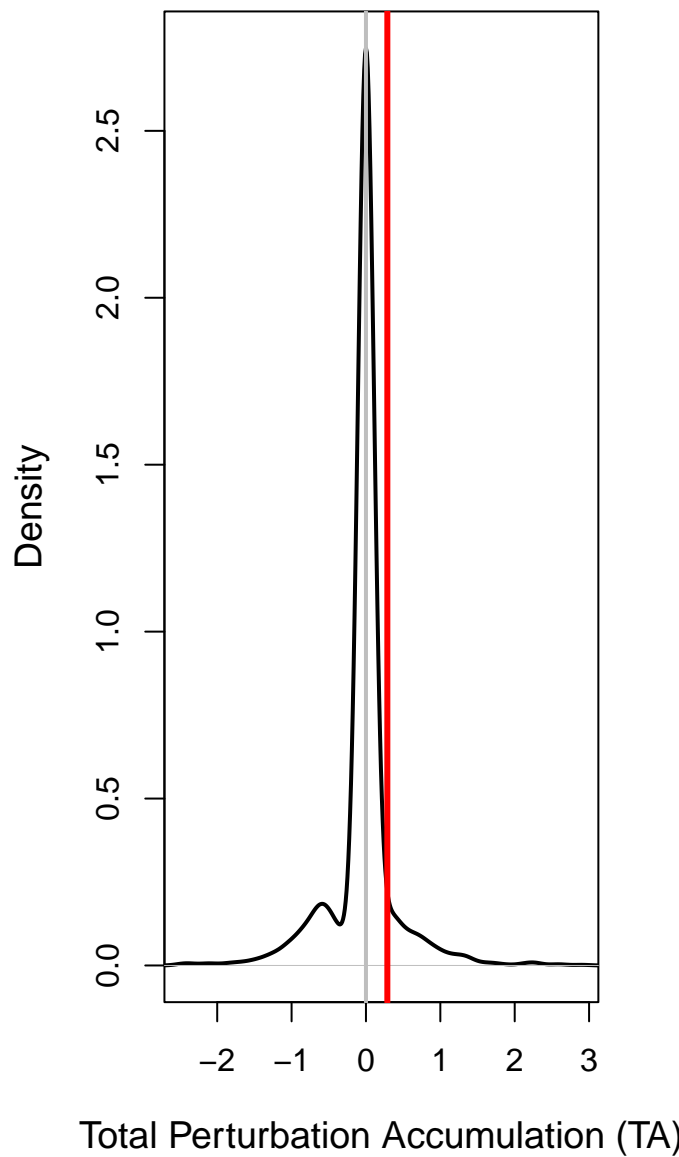




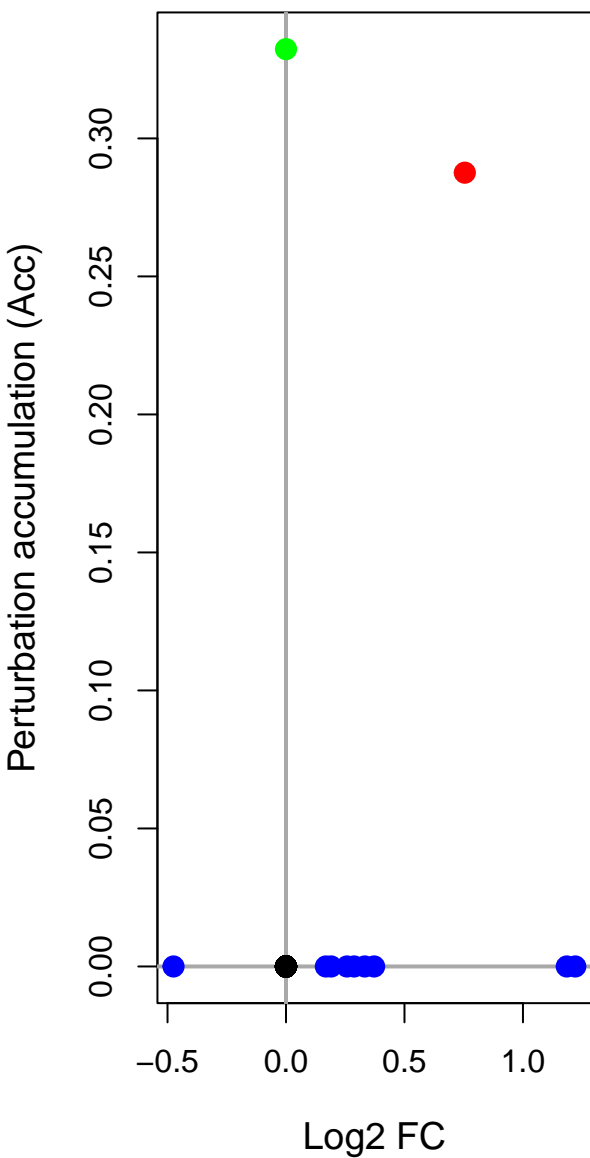
pathway ID=05310



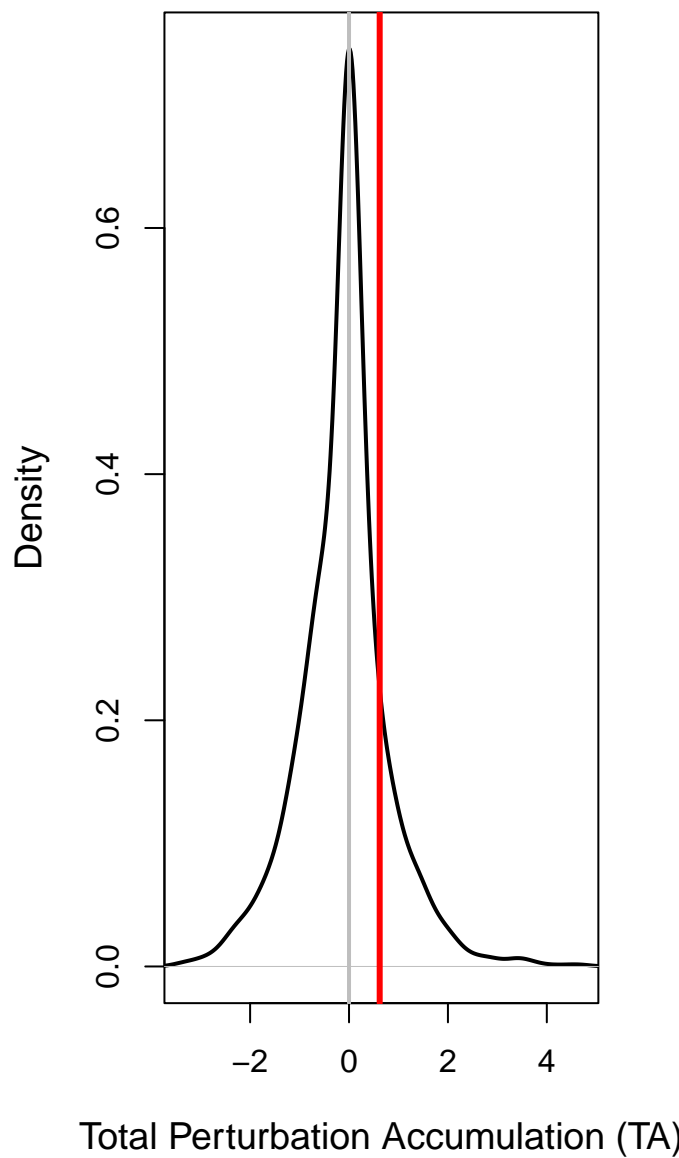
pathway ID=05310 P PERT=0.199



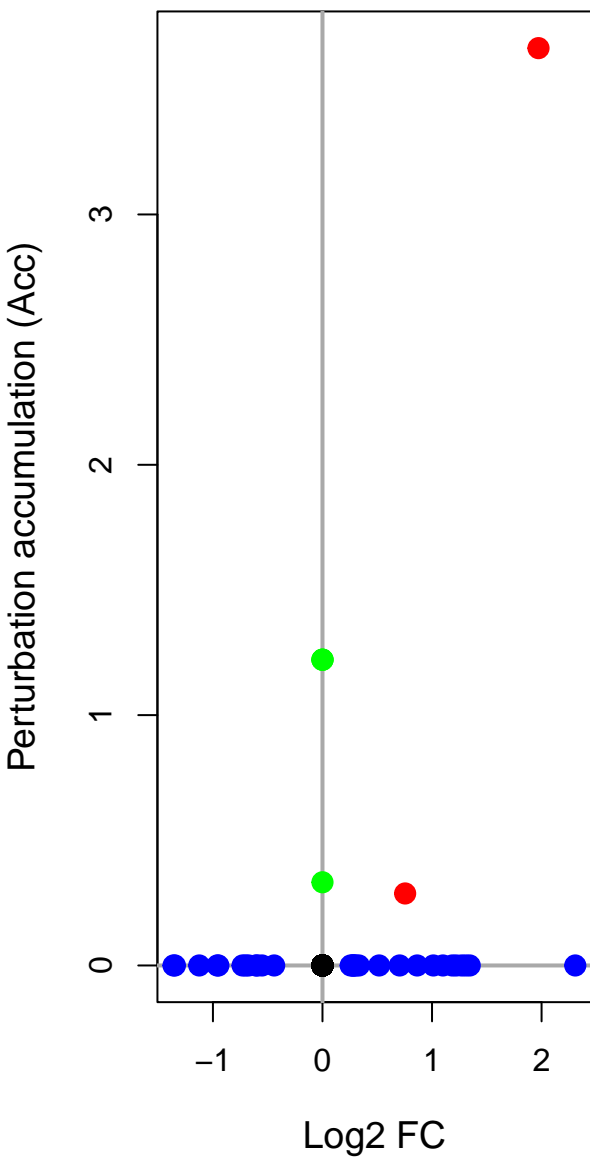
pathway ID=05320



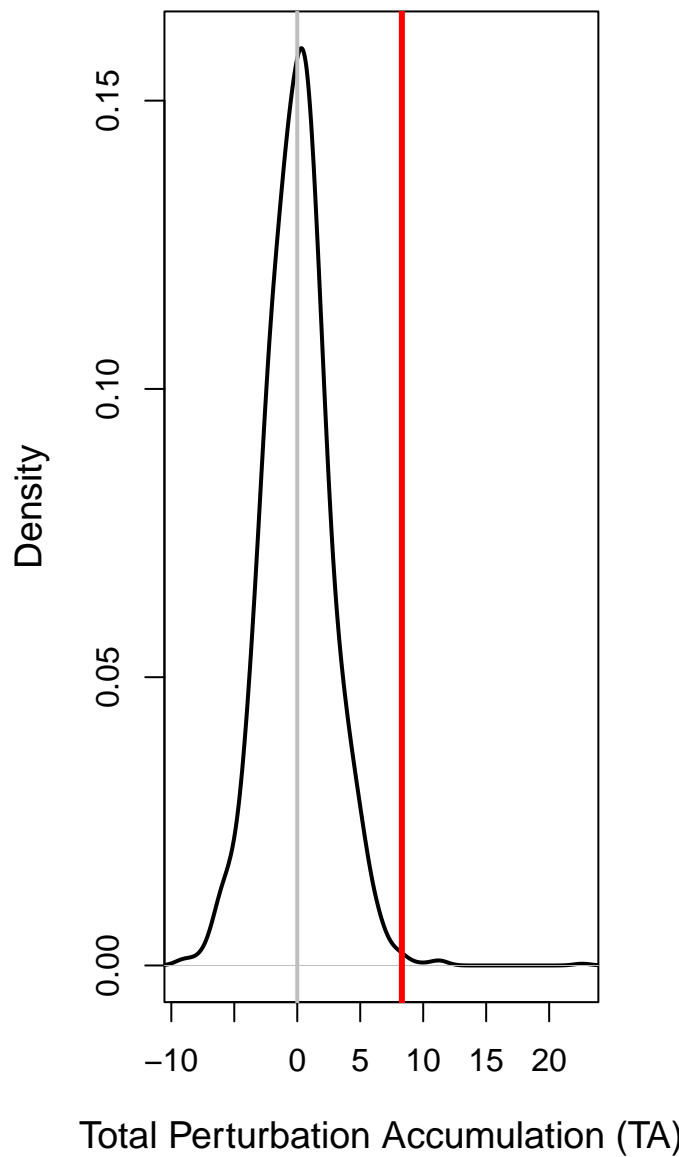
pathway ID=05320 P PERT=0.295



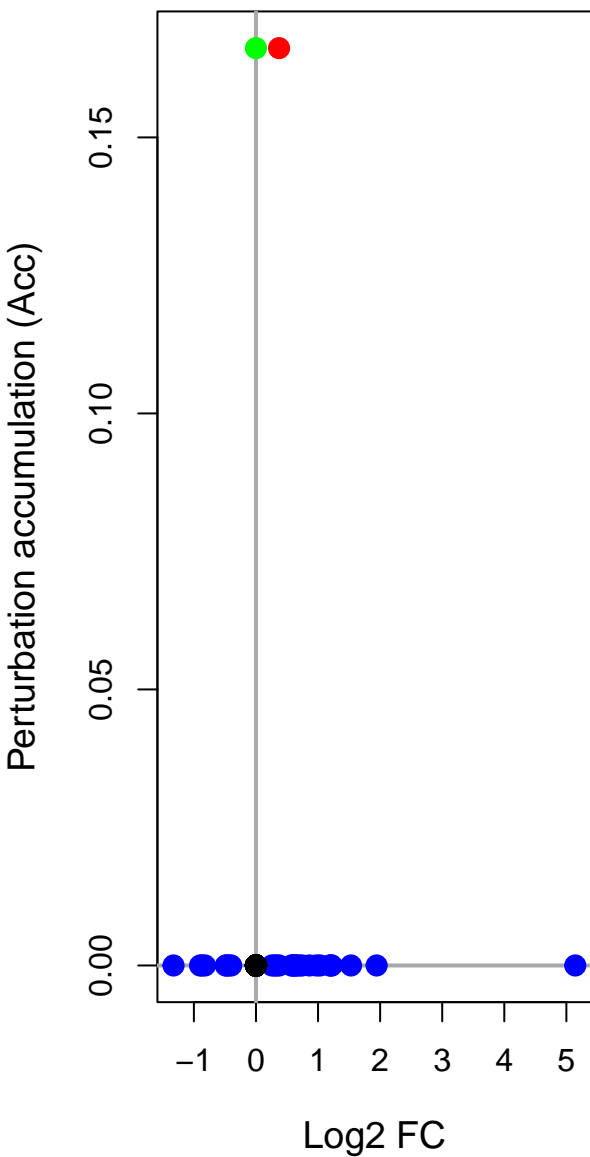
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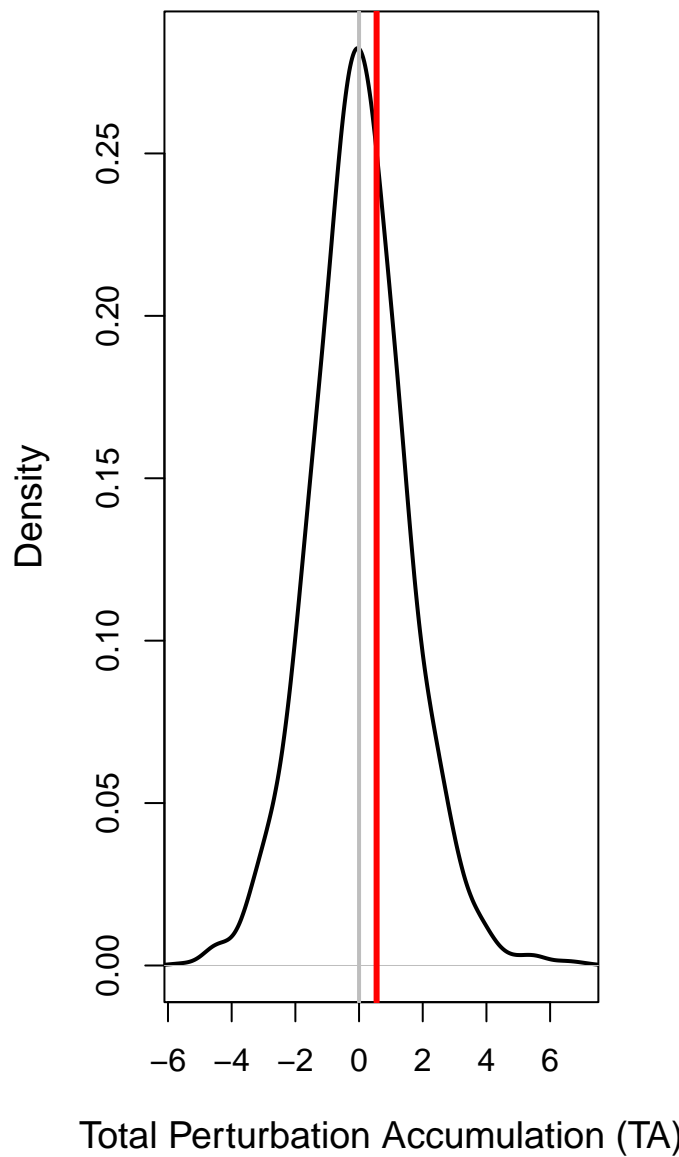
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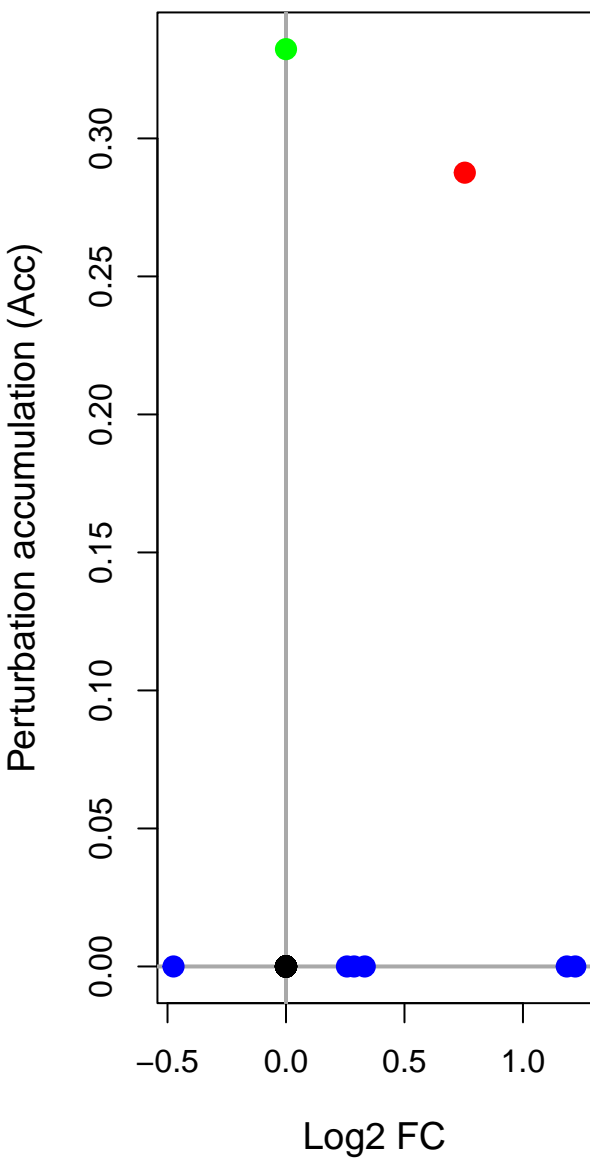
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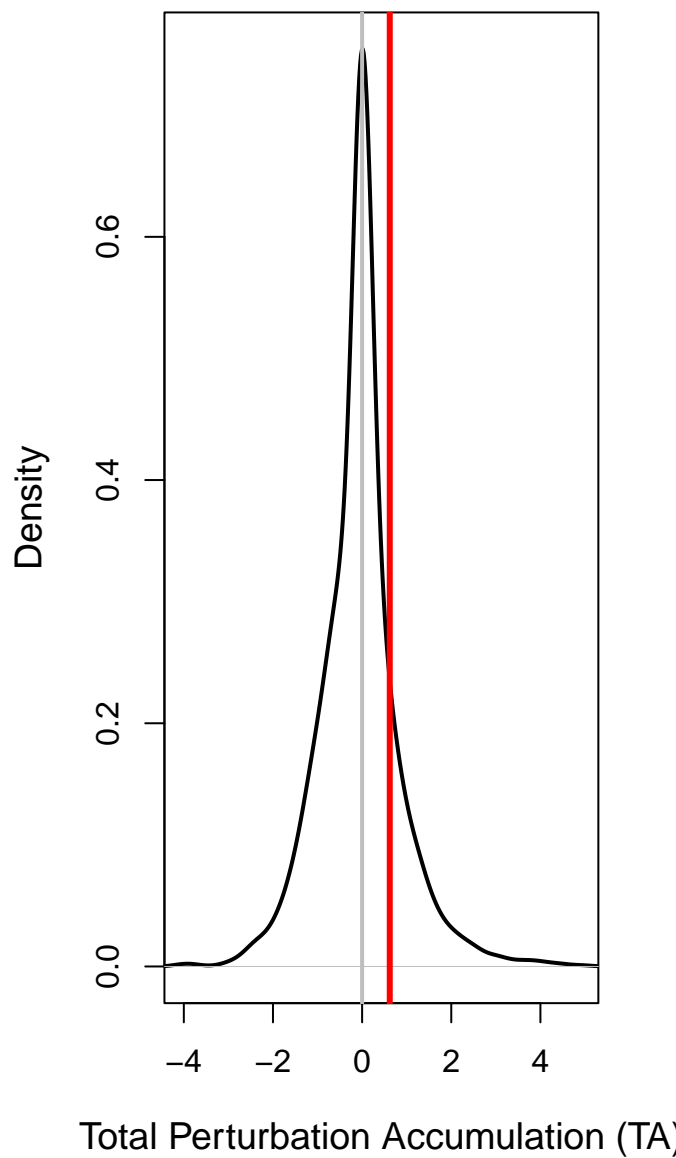
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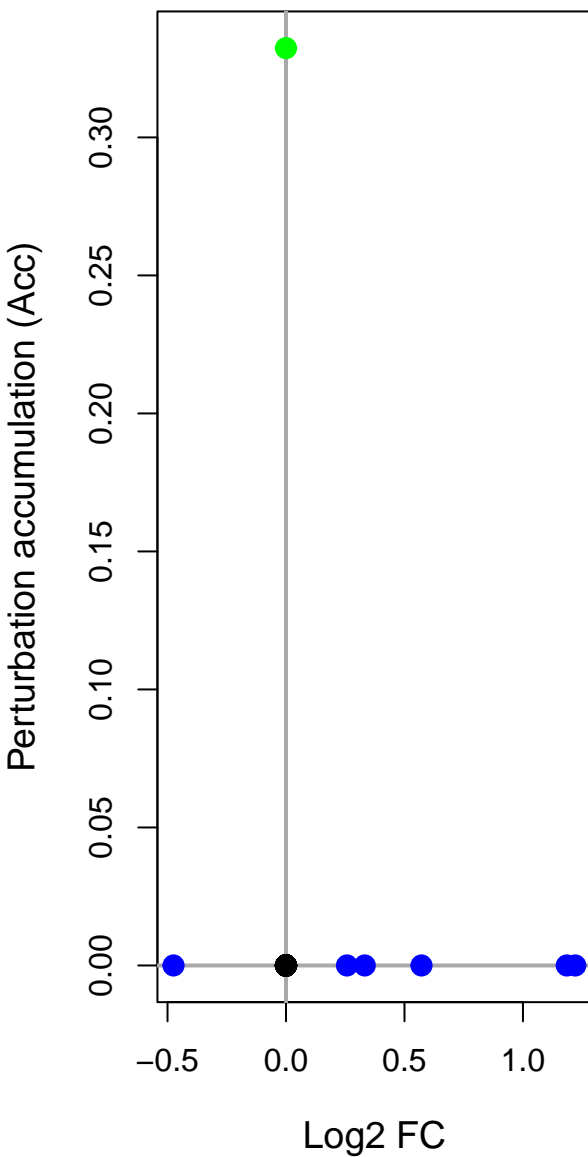
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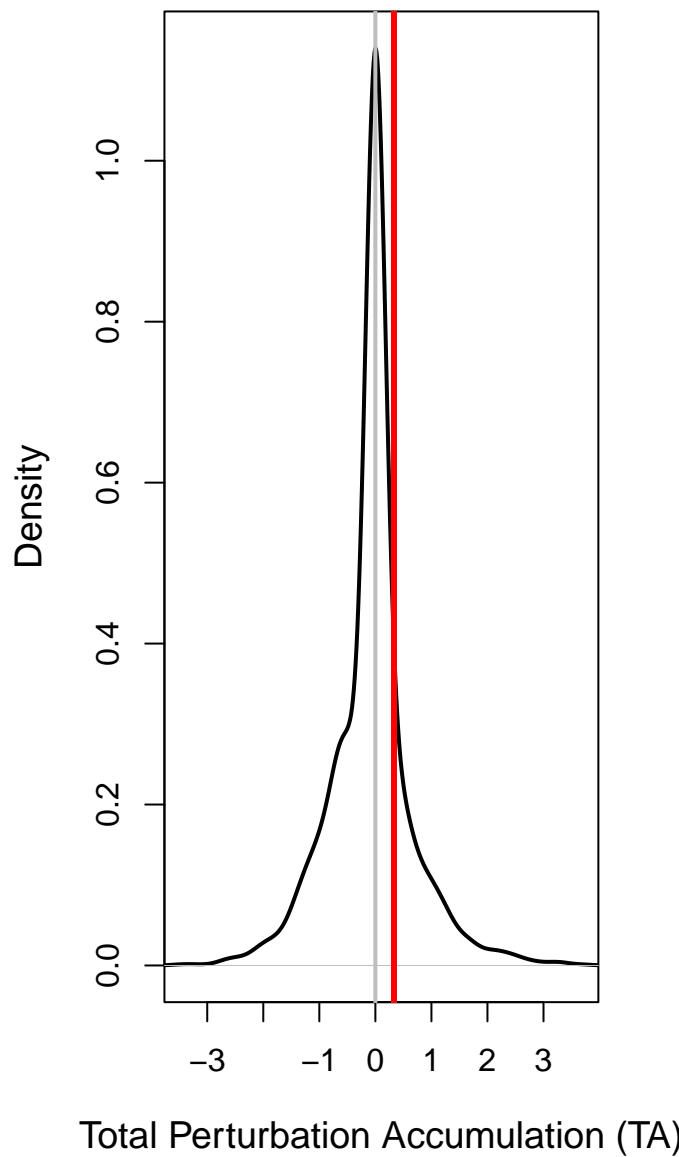
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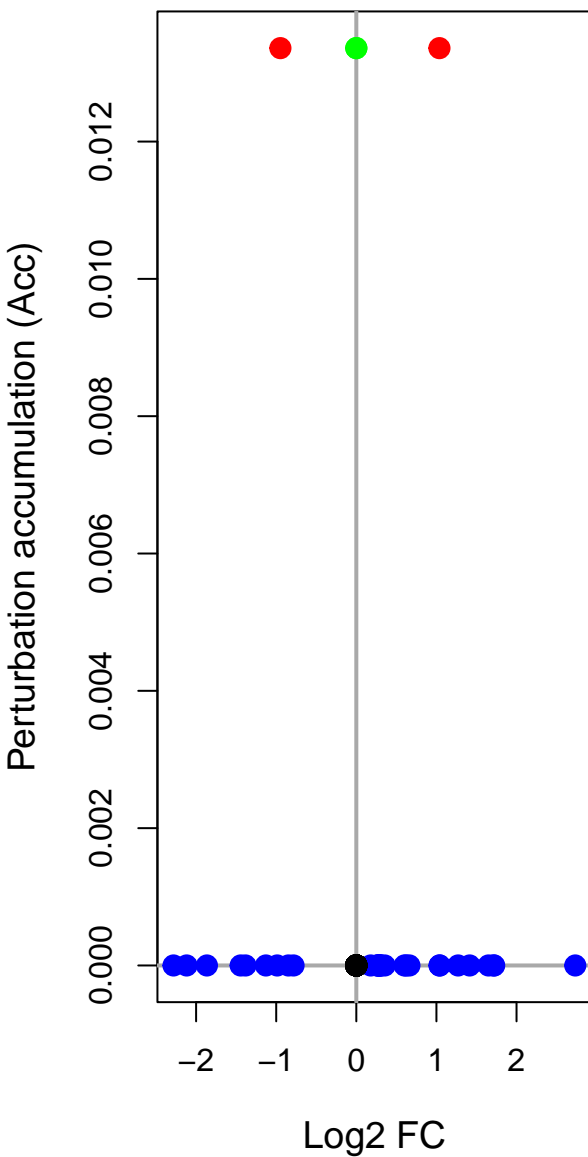
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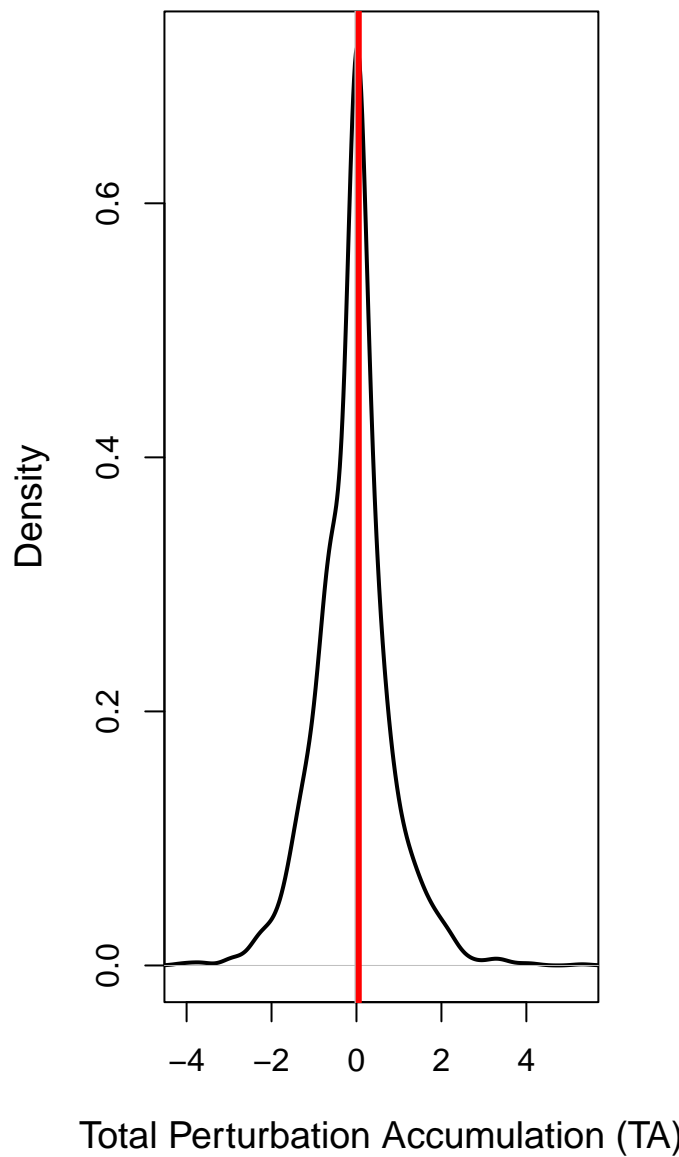
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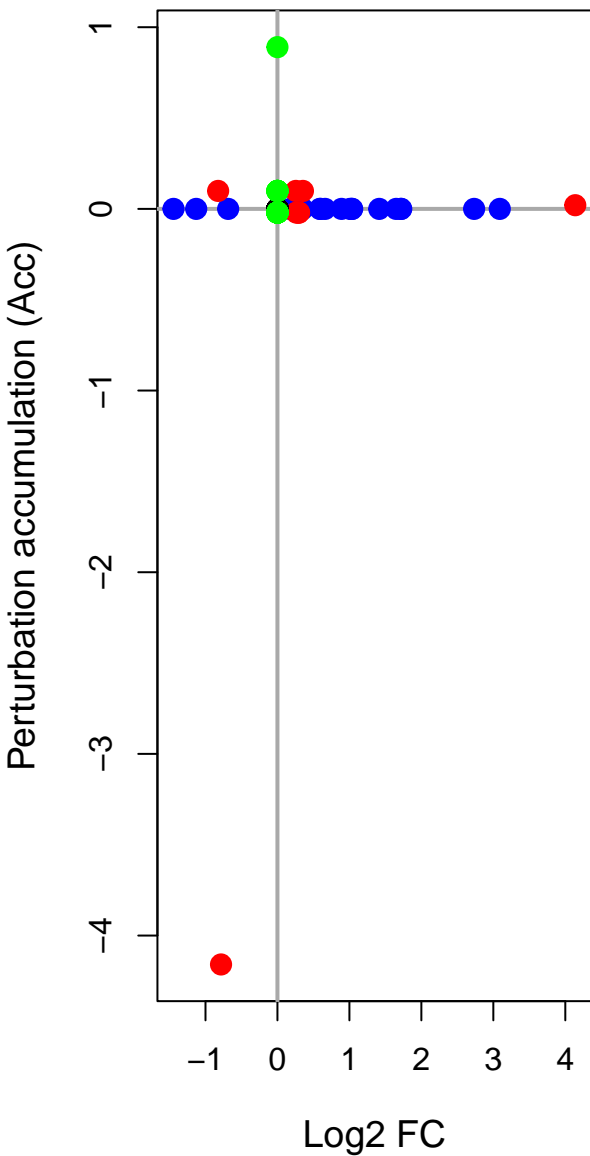
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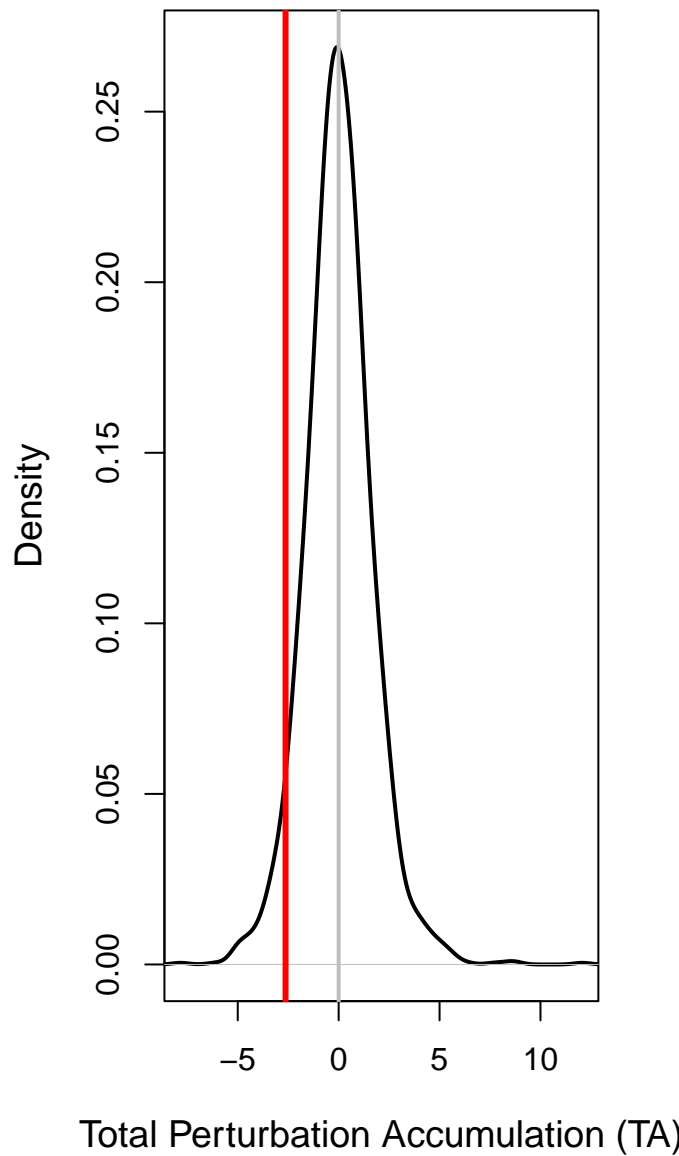
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pathway ID=05414

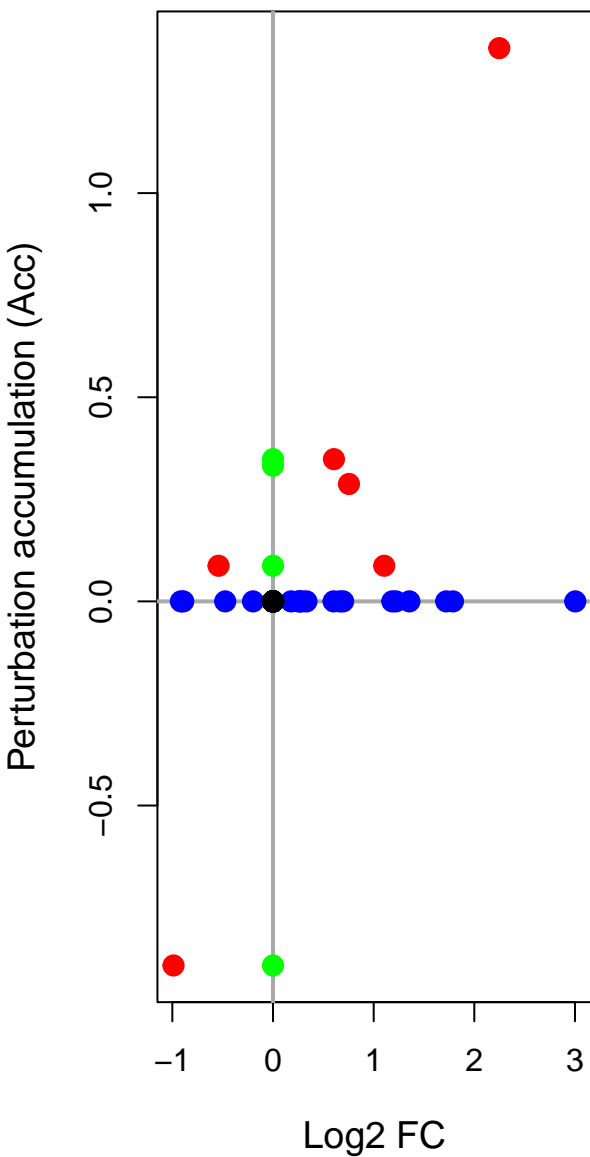


pathway ID=05414 P PERT=0.095





pathway ID=05416



pathway ID=05416 P PERT=0.591

