

Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: PROGENy model coefficients. The model matrix consists of 11 pathways and 1059 genes. Its coefficients are non-zero if the gene-pathway pair corresponds to the top 100 genes that were up-regulated upon stimulation of the pathway in a wide range of experiments. The value corresponds to the fitted z-score across experiments in our model. Only rows with at least one non-zero coefficient were included, as the rest is not used to infer pathway activity.

File Name: Supplementary Data 2

Description: Phosphoprotein measurements. Table of background-corrected and β -Tubulin normalized phosphoprotein intensity. Antibodies used for the following peptides: AKTS473, c-JunS63, ERK1/2T202, Y204/T185, Y187, I κ BaS32,S36, JNKT183,Y185, MEK1S217,S221 and mTORS2448. Columns include replicate number, kind of perturbation, perturbation time, and readout for antibodies.