

Entourage: Visualizing Relationships between Biological Pathways using Contextual Subsets

Supplementary Material

Alexander Lex, Christian Partl, Denis Kalkofen, Marc Streit, Samuel Gratzl,
Anne Mai Wassermann, Dieter Schmalstieg and Hanspeter Pfister

July 2013

In these supplementary document we give examples of Entourage using the Wikipathways database (Figures 1 & 2), in addition to the KEGG examples shown in the main document, thus demonstrating the applicability to other pathway databases.

In addition we demonstrate the scalability of Entourage in Figures 3 - 6. Notice that these scalability examples are extreme cases. We have observed that in a typical analysis between 4 and 7 pathways are used simultaneously, but Entourage can handle more. Also notice that all these examples are readable at full HD resolution (1920x1080) on a conventional 15" notebook screen, but the examples included in this supplement use a higher resolution to guarantee a high print quality. Caleydo and Entourage also implement device independent pixels so that resolution and scale can be adapted to high or low DPI displays.

For more information visit <http://caleydo.org>.

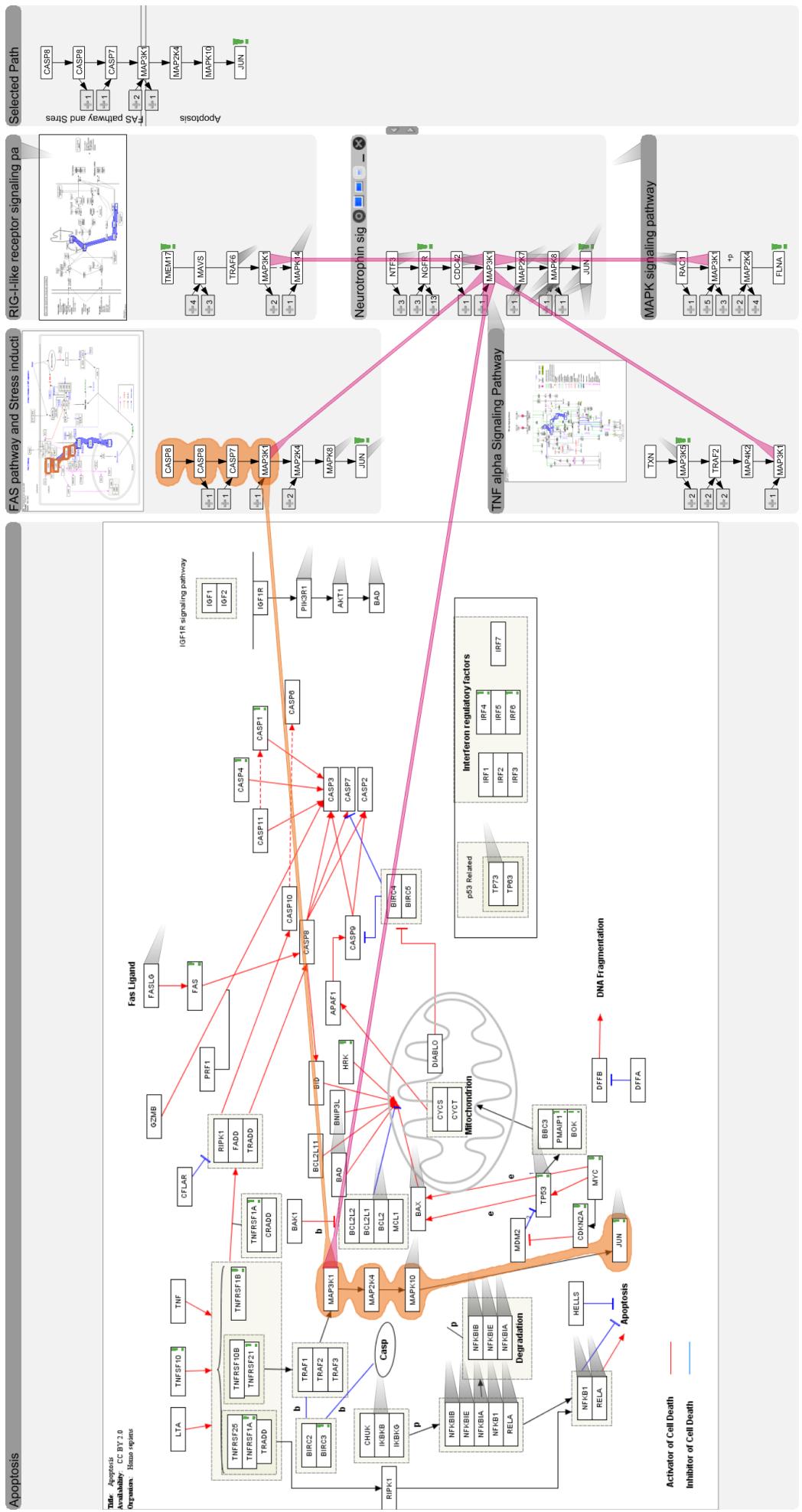


Figure 1: The Apoptosis WikiPathway as the focus pathway and a mix of KEGG and Wikipedia pathways as context.

Apoptosis

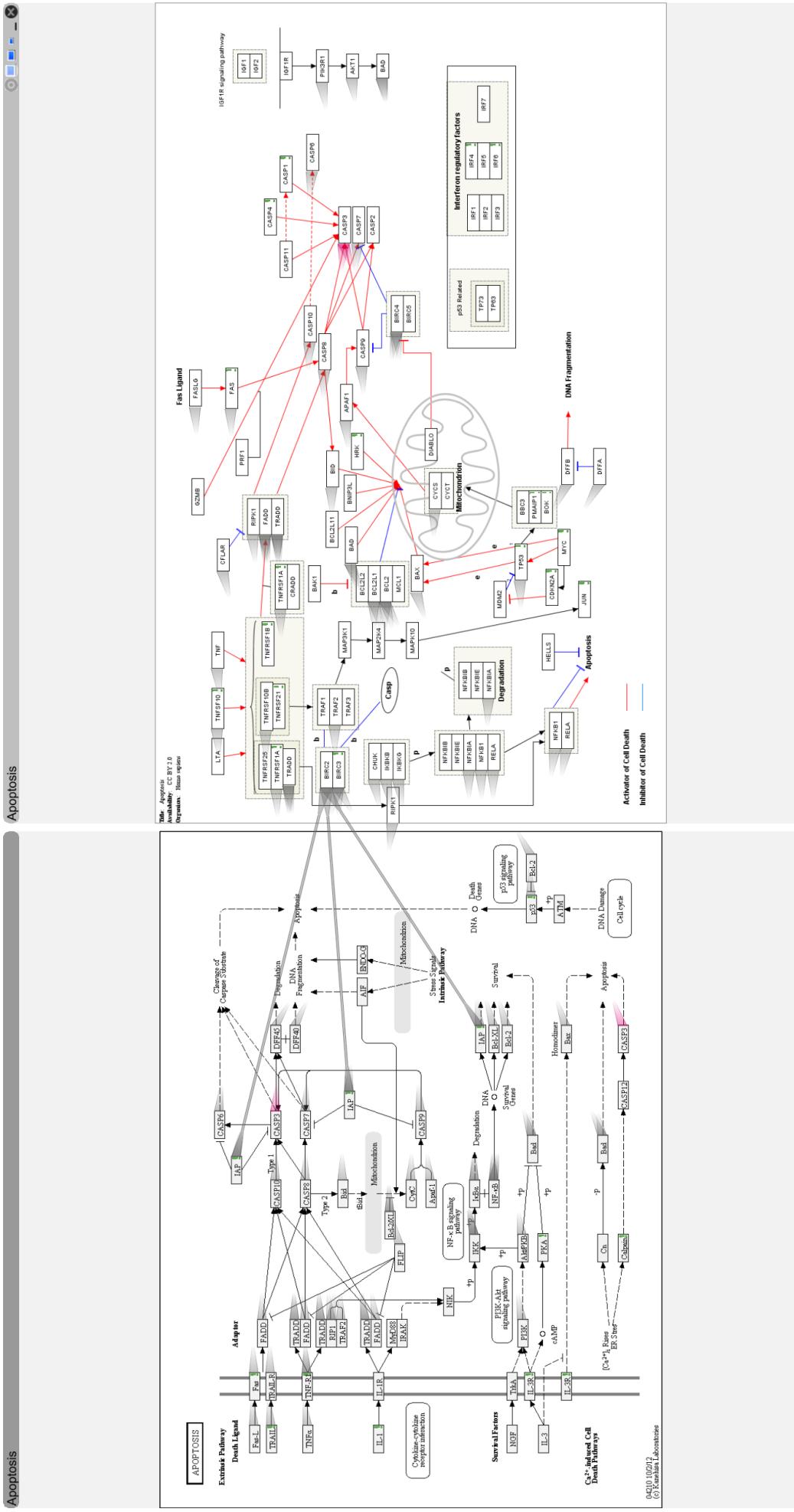


Figure 2: Comparing the same pathways from KEGG and Wikipedia, both in focus.

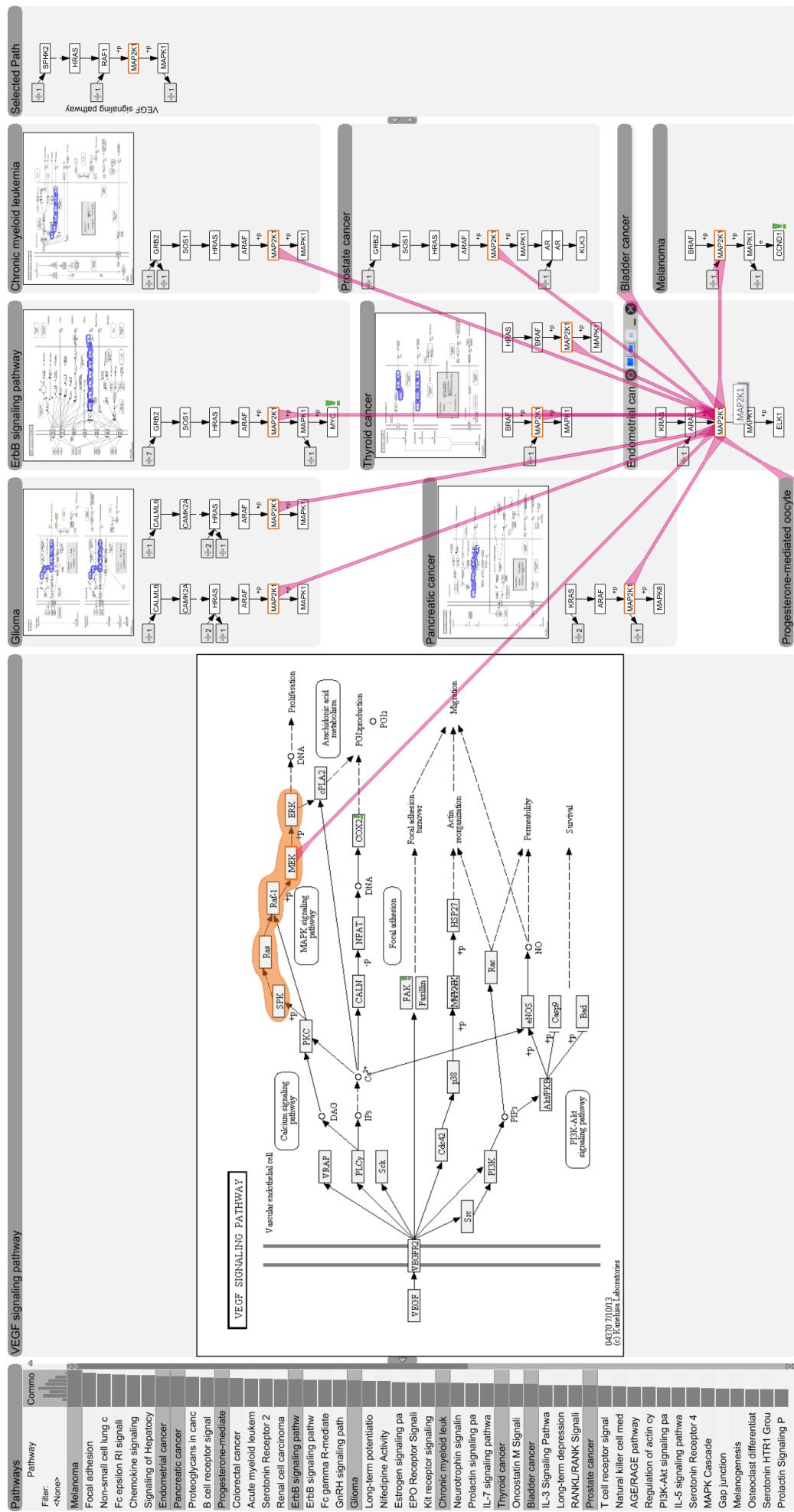


Figure 3: 11 Pathways, 9 of which are at least at the “medium” detail level.

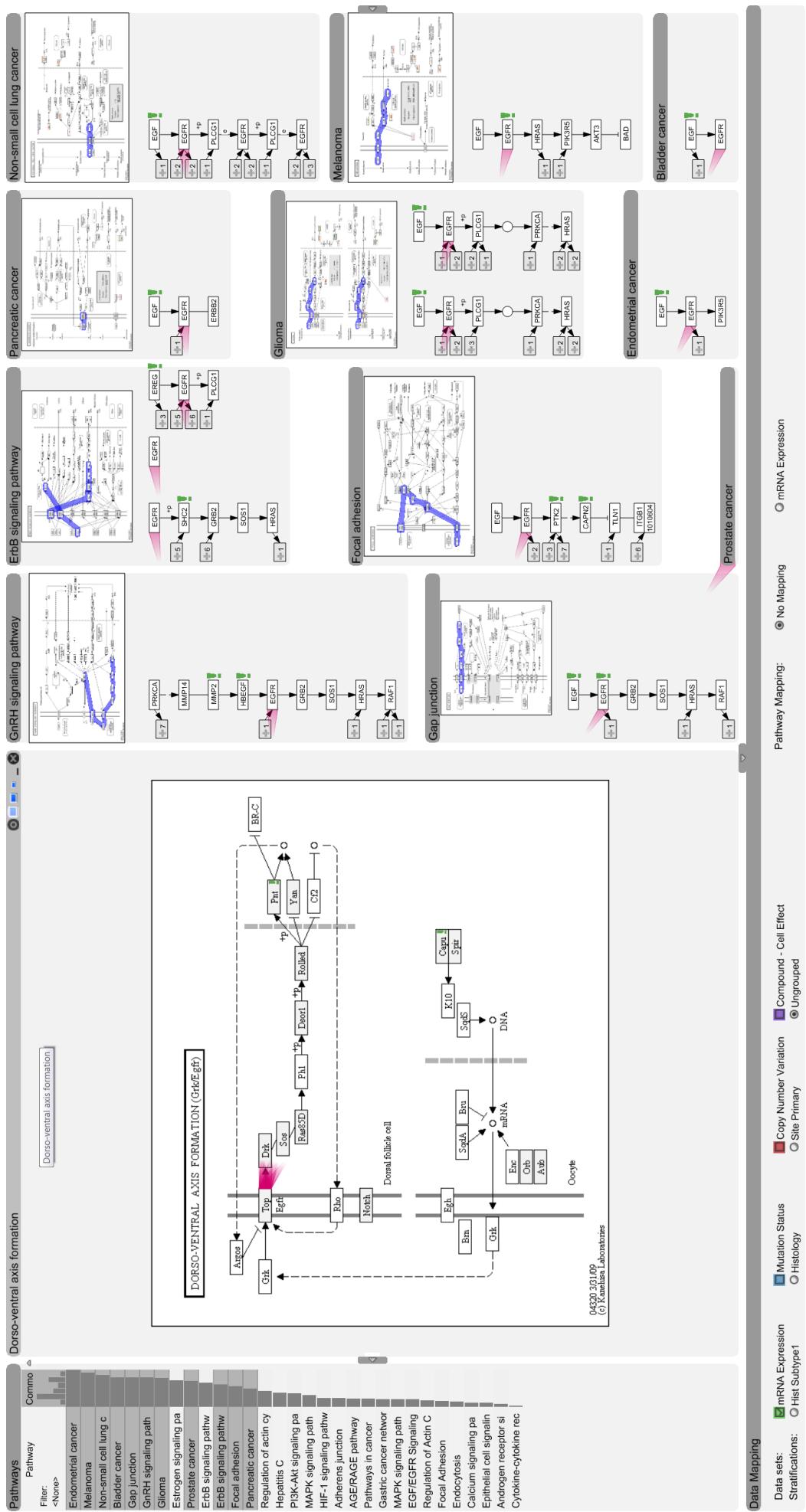


Figure 4: 12 Pathways, 11 of which are at least at the “medium” detail level.

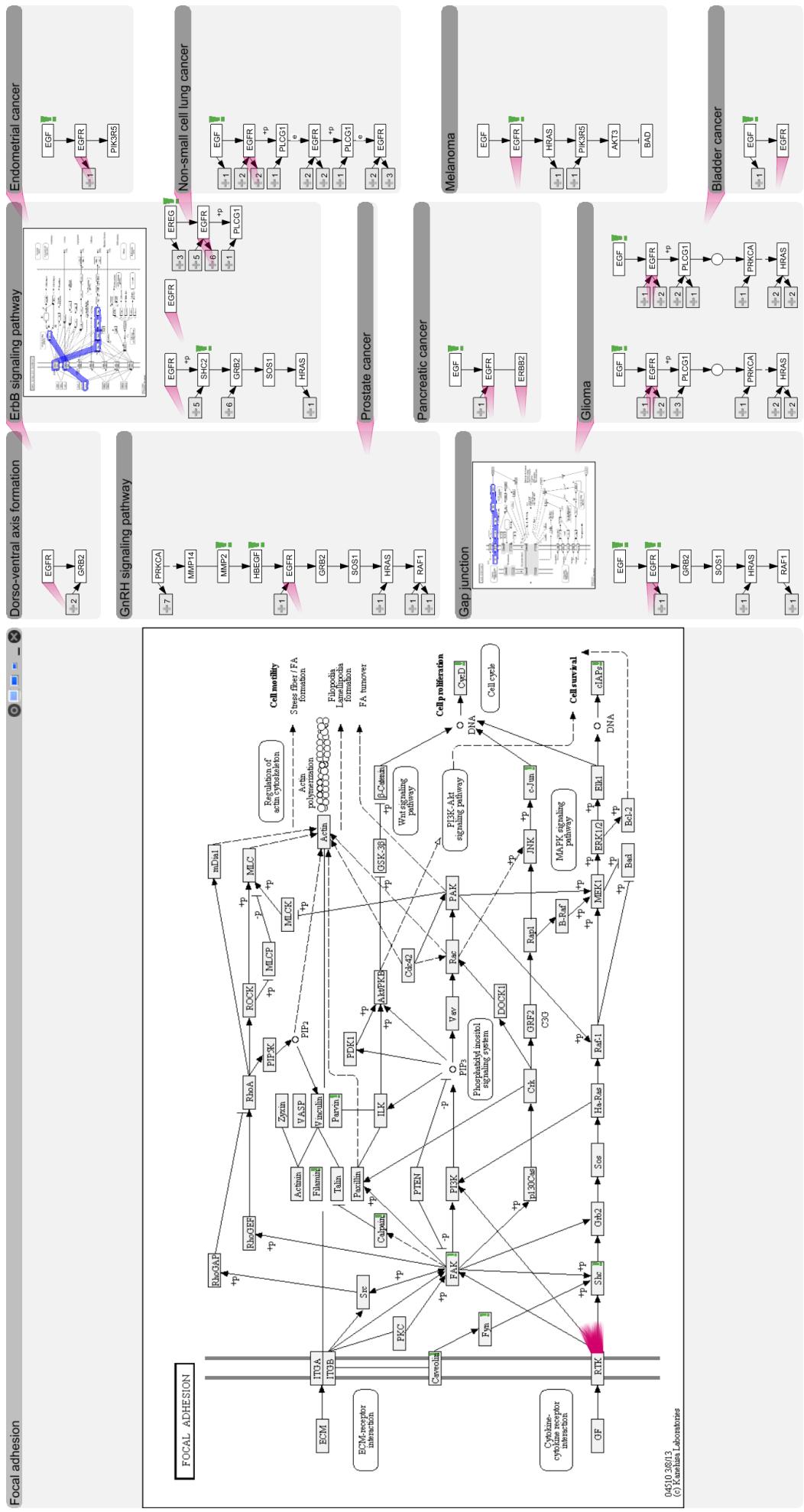


Figure 5: 12 Pathways, 11 of which are at least at the “medium” detail level. The supplementary views are hidden to increase the space for the pathways.

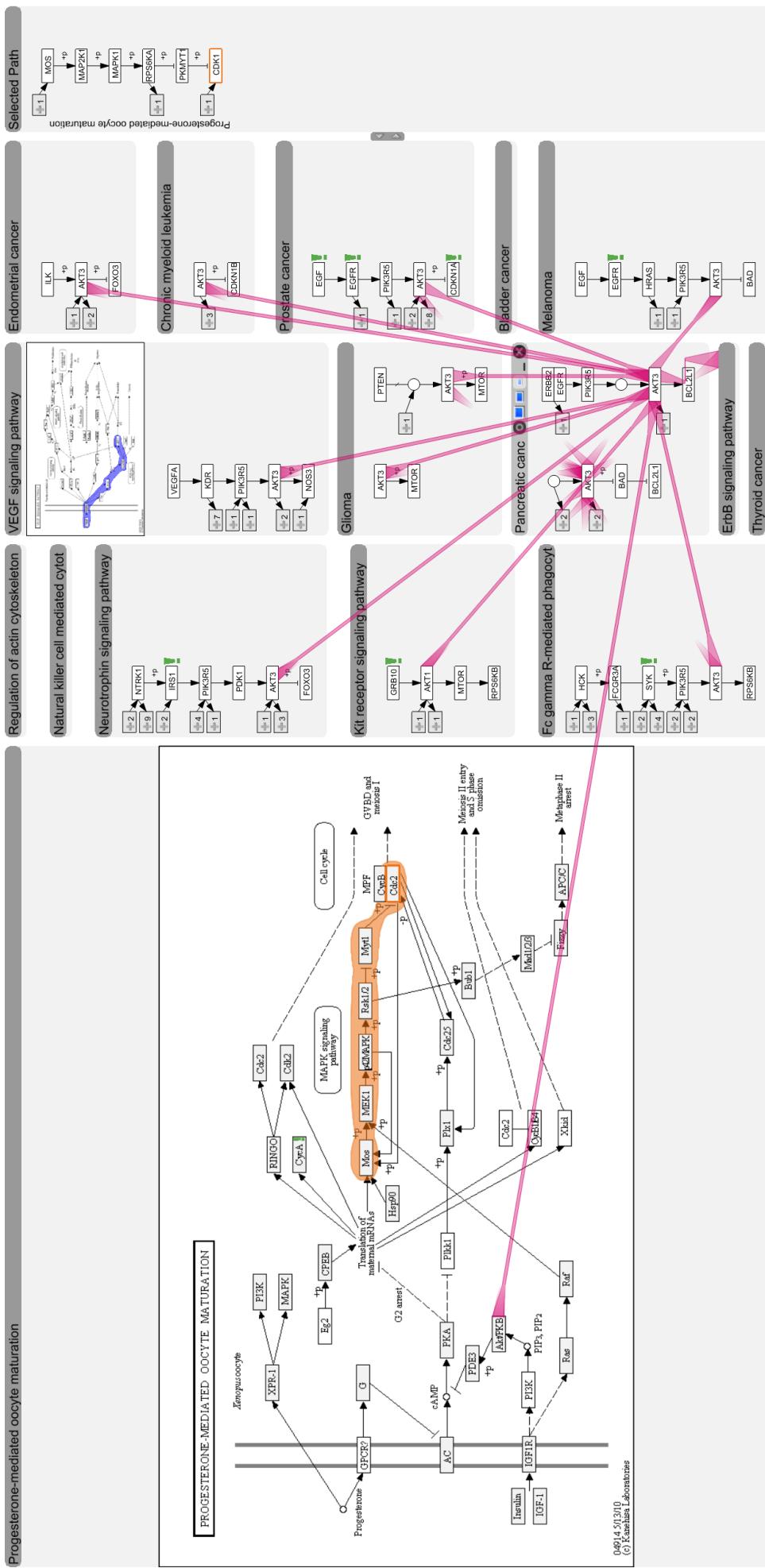


Figure 6: 16 Pathways, 11 of which are at least at the “medium” detail level.