IPA 4.0 Quick Start Tutorial: My Pathways

This tutorial provides a brief overview over the My Pathways functionality in IPA, using either a single gene or a list of genes as a starting point. To access the My Pathways functionality, click the Create a Pathway link from the Welcome screen.

Creating a new pathway using a single gene as a starting point

To explore the biology of a single gene, it can often be helpful to build a pathway containing the gene’s interactions with other genes. Follow these steps to construct a pathway centered around one gene:

1) Click on the “Add Node” icon.
2) Click on the blank canvas. This will cause a new node to appear on the canvas.
3) Double click on the New Node icon. This brings up an interactive box entitled New Node Properties that allows you to search for your gene of interest (FASN in this example).
4) Click “Find Match”. All genes in the Ingenuity Knowledge Base that match that term will be displayed.
5) Select the gene you want to explore and click Ok. This will place your gene of interest onto the My Pathways diagram.
6) Add a second gene of interest (here Ins1).
7) Add in all known interactions from the Ingenuity Knowledge Base by first selecting all nodes on your canvas, then clicking the Connect tool.

Creating a new pathway using a list of genes as a starting point
Suppose you are interested in building a pathway based only on those genes that are involved in a particular function or disease, e.g. in the progression of malignant tumor.

1) Type progression and malignant tumor into the search box. A list of genes associated with that function is returned.
2) Check the box next to progression of malignant tumor to select all genes.
3) Click “Add to List” to send these genes to a list.
4) Select the options icon to add these genes to a pathway. The result is shown below. To explore the interactions between these genes, you could again use the Connect tool.