

PATHWAY STUDIO[®]

Snapshots on siRNA Research



Get the most out of your siRNA experiments by viewing mechanistic effects of gene knock-out before starting the experimental work.

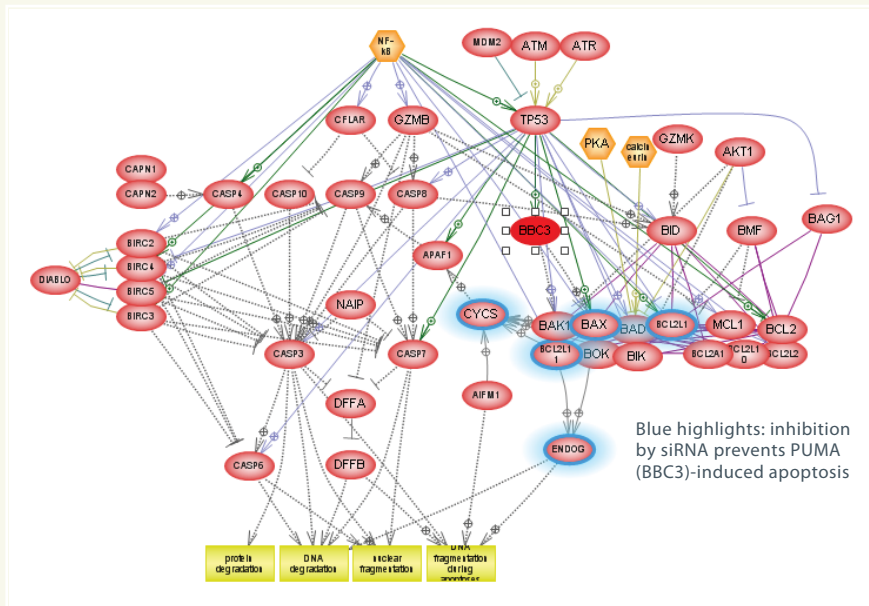
Research Question:

How do I optimize my gene knock-out experiment and pick siRNA targets?

Pathway Studio Workflow:

1. Search Pathway Studio database for your specific gene, protein, or cellular process
2. Create, tweak, and analyze pathway
3. Determine gene(s) that are the best candidates for siRNA experiments
4. Examine downstream events to anticipate the results of knockout.

Example: Validation of siRNA screening with analysis in Pathway Studio



This figure created in Pathway Studio illustrates how genes downstream to BBC3 (shown as red oval) could prevent or block BBC3-induced apoptosis. siRNA experiments could be designed to test this observation. Data collected from these experiments can be further imported in Pathway Studio and used to update this network to show how selective the siRNA reagent was in blocking or inhibiting BBC3.

NEW! Pathway Studio version 6

Pathway Studio augments your traditional way of working with literature with an immediate automatic access to all published facts in a single database amenable for easy search.

- Interpret experimental data
- Build, expand and analyze pathways
- Find relationships among genes, proteins, cell processes, and diseases
- Draw publication-quality pathways

ResNet Mammalian Database

Over 1.5 million relations for:

- 110,435 proteins
- 13,533 small molecules
- 2814 cellular processes
- 2,410 diseases

Pathways:

- 227 receptor signaling pathways
- 21 new cellular process regulation pathways