

Mechanism of Action Reconstruction

Identify and analyze the key molecular mechanisms underlying your indication or drug of interest to enhance understanding and drive targeted therapeutic strategies

Description



Evaluate existing omics data - yours or from literature - to reconstruct biological mechanisms for disease understanding, target mechanism validation, toxic effect prediction and more

Methodology

- Collection and analysis of high-quality omics data by our expert bioinformatics consultants
- Utilize state-of-the-art Clarivate algorithms to identify key regulators, network nodes, and topology
- Integrate all results into a mechanism of action map, connecting omics signatures to disease biology, drug action, resistance, and toxicity profile

Output

- Comprehensive mechanism of action for the medical condition or drug of your interest.
- Expand your knowledge with potential new key regulators, cell or tissue-specific factors, and essential aspects to design your preclinical strategy.
- Integrated molecular insights enriched with toxicology, drug resistance, targets, and other proprietary biomedical data.

Analysts & expert-curated datasets



30+ multi-omics analysis experts



Computational Biology methods for Drug Discovery (CBDD) containing 79 systems biology algorithms



4.6M+ molecular interactions



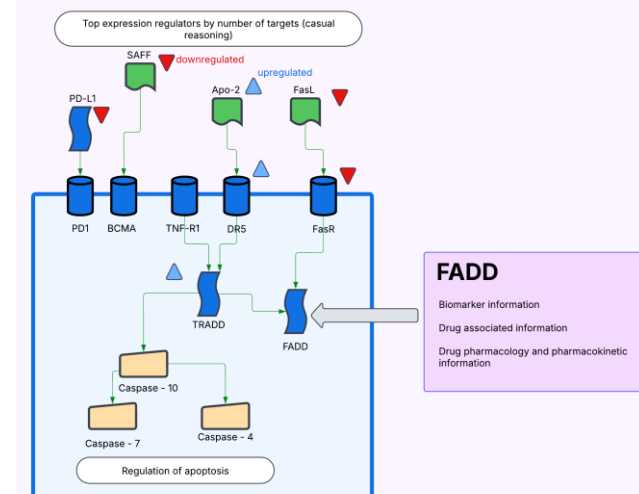
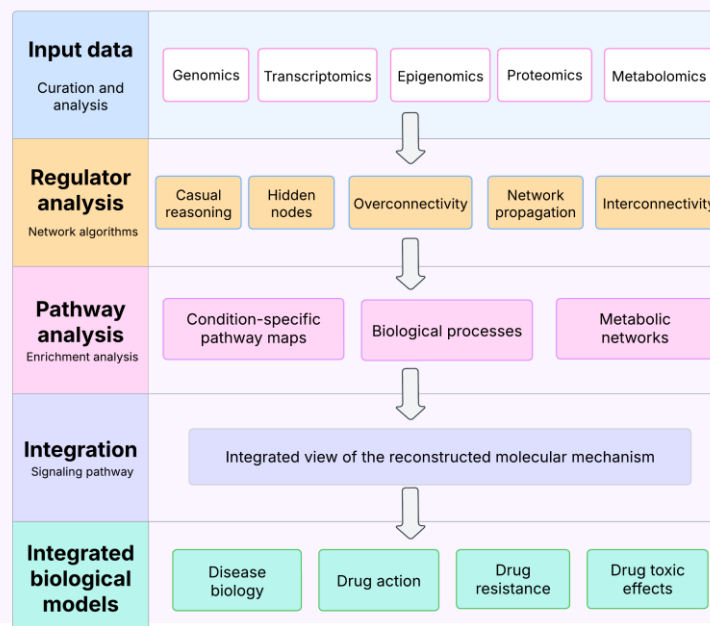
1,500+ pathway maps



746K+ drugs and biologics



48K+ biomarkers (2.7M+ biomarker uses)



Typical Project Timeline

From 8 weeks, subject to complexity

Select case studies available upon request