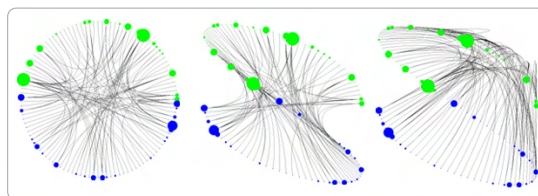
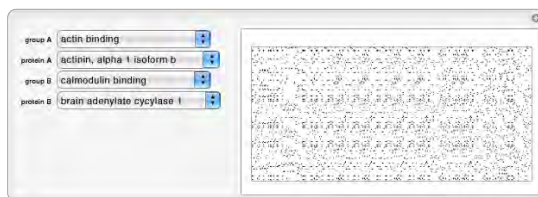
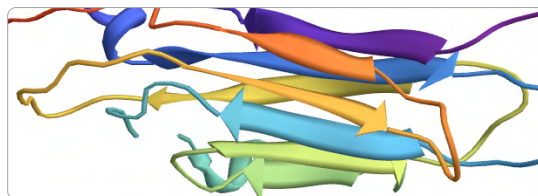


THE *MATHEMATICA*[®] BIOINFORMATICS SOLUTION

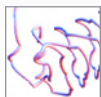
Pull in your data or ours, apply sophisticated symbolic and numeric analysis, visualize, generate interactive reports or instant applications—all in one system, with one integrated workflow.

The *Mathematica* bioinformatics solution seamlessly integrates specialized capabilities—like built-in computable genome and protein data and sequence alignment—while providing the most automated and reliable computation, development, and deployment environment available.



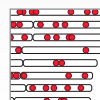
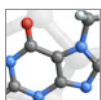
Why *Mathematica* in Bioinformatics?

Mathematica includes thousands of built-in functions for computation, modeling, visualization, development, and deployment.



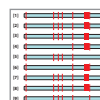
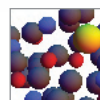
KEY BIOINFORMATICS CAPABILITIES

- Built-in curated human genome, protein, and chemical data ready for use
- Sequence alignment using local or global alignment methods such as Smith–Waterman, Needleman–Wunsch, and more
- Complete workflow, from data import and high-powered analysis to automatic report generation and interactive deployment
- Built-in parallel computing for accelerating solutions to computation- or data-intensive problems
- Automated interface construction to simplify prototyping interactive parametric models



WAYS TO USE

- Rapidly search the human genome or compare gene structures
- Visualize gene interaction networks
- Generate sequence alignments in a computable form
- Easily integrate legacy data with ready-to-use curated genomic and protein data in a powerful computational environment
- Construct applications and deploy them interactively with *Mathematica Player*[™]
- Generate accurate protein renderings using integrated protein structure, element, and color data



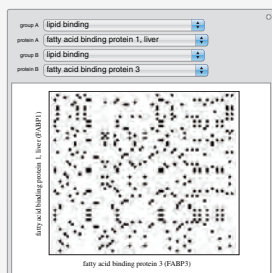
And more at:

➔ wolfram.com/solutions/flyer/bioinformatics

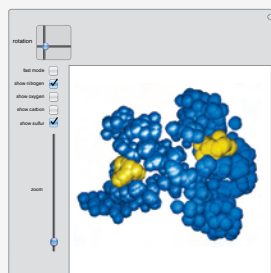
MATHEMATICA IN BIOINFORMATICS

Interactive Bioinformatics Examples

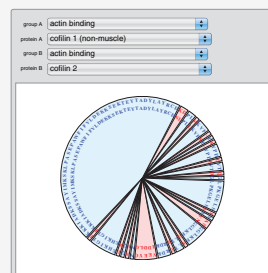
The Wolfram Demonstrations Project offers thousands of free, ready-to-use models contributed by users. Here are a few examples:



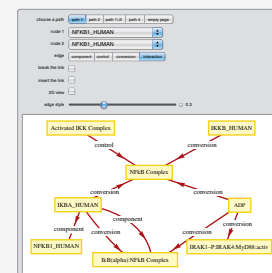
Protein Dot Plot



Insulin Molecule



Protein Alignment Wheel



Handling Molecular Pathways

WHO USES MATHEMATICA?

Some of the most important institutions in the world, including:

Abbott Labs	GlaxoSmithKline
Amgen	Max Planck Institutes
Bayer	Merck
Bristol-Myers Squibb	Pfizer
Eli Lilly	Roche Diagnostics

WHAT ARE THE EXPERTS SAYING ABOUT MATHEMATICA?

"It's a remarkably diverse collection of functionalities.... You're stunned by the things it can do. It's my desert-island application. It's the ultimate intellectual Swiss Army Knife."

David DeBrotta,
Senior Clinical Research Physician, Eli Lilly and Company

"*Mathematica* is an indispensable puzzle-solving tool for biological sciences, which are becoming increasingly more quantitative."

Melih Sener,
Biophysicist, University of Illinois at Urbana-Champaign

Vertrieb durch:
ADDITIVE GmbH • Max-Planck-Straße 22b • 61381 Friedrichsdorf
<http://www.additive-net.de/mathtype> • eShop: <http://eshop.additive-net.de>
Verkauf: +49-6172-5905-30 mathtype@additive-net.de
Support: +49-6172-5905-20 support@additive-net.de

NEXT STEPS

Visit our Bioinformatics Solutions page to find out how to incorporate *Mathematica* into your daily work and research.

Key resources include:

- Video screencasts
- Free online seminars
- Full *Mathematica* documentation, with more than 50,000 examples, how tos, and tutorials
- Bioinformatics books and articles

➔ wolfram.com/solutions/flyer/bioinformatics

QUESTIONS?

Contact us and let us work with you to find the right solution for your computational needs.

WOLFRAM RESEARCH, INC.
info@wolfram.com
1-800-WOLFRAM (965-3726)
+1-217-398-0700
(outside U.S. & Canada)

WOLFRAM RESEARCH
EUROPE LTD.
info@wolfram.co.uk
+44-(0)1993-883400