TRANSFAC® / ExPlain™

Gene Regulation Analysis

TRANSFAC® / ExPlain™ Overview

TRANSFAC is a knowledgebase containing data on eukaryotic transcription factors, their experimentally-proven binding sites, and regulated genes. Based on its broad compilation of binding sites, positional weight matrices are derived to search DNA sequences for predicted transcription factor binding sites. Promoter analysis of high-throughput data based on TRANSFAC positional weight matrices is provided in the companion ExPlain™ Analysis System.

ExPlain is a unique data analysis system that combines promoter and pathway analysis tools. It enables you to identify transcription factors affecting gene expression in your microarray and RNA-Seq experiments, as well as predict how they, in combination, can induce observed gene expression patterns.

TRANSFAC® / ExPlain™ Advantages & Benefits

- Quickly access detailed reports for transcription factors, their binding sites and regulated genes
- Predict transcription factor binding sites within DNA sequences
- Build custom transcription regulatory networks
- Integrate TRANSFAC's positional weight matrices into your own or 3rd party tools
- Model how transcription factors act together to affect gene expression patterns
- Understand the cause of differential expression in response to drug treatment / disease state.
- Identify potential therapeutic targets or biomarkers

Key Features

TRANSFAC®

- 34,000+ transcription factor binding site reports
- 18,000+ transcription factor reports
- 2,300,000+ ChIP fragment reports
- 277,000+ promoter reports
- Match™ binding site prediction tool
- Pathway visualization tool

ExPlain™

- Advanced data management options
- Specialized algorithms for optimized transcription factor binding site prediction
- Advanced network and pathway analysis tools

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BIOLOGICAL DATABASES

For more information e-mail us at:
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