

Modules of the Genomatix Software Suite

Genes & Genomes

- Retrieval and visualization of the Genomatix genome annotations for 33 different organisms
- Extraction of promoter sequences
- Variant analysis (including detection of amino acid changes and changes in transcription factor binding sites)
- Identification of orthologous regions within the available organisms
- Association of genomic features / positions to detect distance based correlations

Gene Regulation

- Detection of transcription factor binding sites using MatInspector
- Identification of common or overrepresented transcription factor binding sites in sets of multiple sequences
- MatBase, the Genomatix transcription factor database, containing thousands of transcription factors, weight matrix descriptions, gene-gene interactions, literature citations, ...
- Gene regulation analyses, multiple sequence alignments, definition and search of complex regulatory patterns

Literature & Pathways

- Generation and visualization of pathways, networks and processes
- Characterization of gene sets based on annotation and literature (e.g. pathways, GO & MeSH terms, small molecules)
- LitInspector for obtaining information on genes, gene correlations, pathways, diseases, tissues and small molecules from published literature