

GENEVESTIGATOR

UNLEASH THE VALUE OF PUBLIC GENOMIC DATA

PUBLIC DATA

- ▶ Thousands of genomic studies
- ▶ Human, model organisms
- ▶ Diseases, cancers, cell lines, genotypes



BIOCURATION

- ▶ Professional curation by experts
- ▶ Controlled vocabularies
- ▶ Verified annotations



HIGH QUALITY CONTENT

- ▶ 120'000+ profiled samples
- ▶ Stringent quality control
- ▶ Global normalization



POWERFUL SEARCH TOOLS

- ▶ Research and clinical tools
- ▶ Publication-quality figures
- ▶ Fast and user-friendly



KEY BENEFITS

- ▶ More effective discovery
- ▶ Improved interpretation
- ▶ Better translation to the clinic



GENEVESTIGATOR® is a high performance search engine for genomic data. Its high quality content and its intuitive Web-based interface deliver a new generation of tools for biopharmaceutical research, disease diagnostics and for individualized medicine. The deep integration of data with sample descriptions enables users to seamlessly explore and interpret public and proprietary data.

High quality content only

All data integrated into GENEVESTIGATOR® are quality controlled and manually annotated by curators using controlled vocabularies. NEBION curators are PhD biologists and medical experts with extensive research experience in many therapeutic areas. Experimental and sample descriptions, including clinical parameters, are manually collected from various sources to provide complete and precise annotations. Only high quality and well-described experiments are integrated, allowing a robust and professional analysis outcome. The rich content of individual experiments and reference profiles offers a unique opportunity to search, prioritize and validate novel targets.

A powerful suite of tools

Instantly explore the global genomic data content with unique and powerful tools. Extract essential findings from thousands of experiments on-the-fly with high flexibility. Take advantage of a continuously growing suite of tools to efficiently make novel discoveries or to confirm your own findings.

Products and access

▶ GENEVESTIGATOR® Professional

Online access to all tools and all public curated content via a secure login. Advantages: no installation nor maintenance; easy and direct online ordering

▶ GENEVESTIGATOR® Enterprise

On-site installation of the complete GENEVESTIGATOR® system, deployed within your company's intranet. Advantages: allowing integration of proprietary data for powerful combination with public data; full access to data via API for connection to 3rd party tools; full data export capabilities



Applications and added value

Study gene function or mechanisms of drug and disease

- Easily find which conditions regulate a gene of interest (organs and tissues; cell lines; neoplasms; perturbations such as chemicals, diseases, cancers, genotypes; and stages of development)

Prioritize targets and biomarkers

- Visualize their expression across contexts and correlate with clinical parameters
- Cluster target genes having similar expression regulation

Discover novel targets and biomarkers

- Find genes specifically expressed in a chosen set of tissues or cancers
- Find genes specifically up- or down-regulated in response to a chosen perturbation (diseases, genotypes, drugs)
- Find genes specifically expressed at a chosen developmental stage

Interpret your results

- Find other experimental conditions causing similar results
- Cluster genes by their expression in various biological contexts

Predict side-effects

- Identify tissues in which your target has an essential function
- Find perturbations regulating a gene of interest

Analyze gene regulatory networks

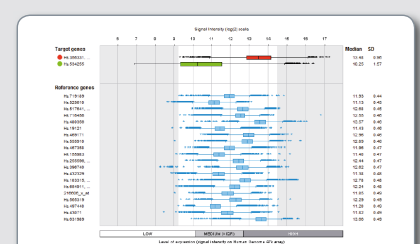
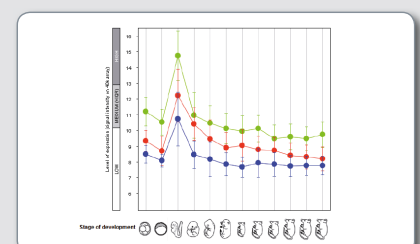
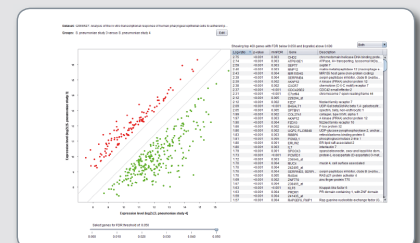
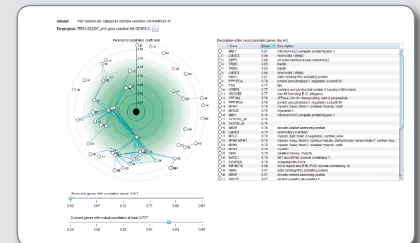
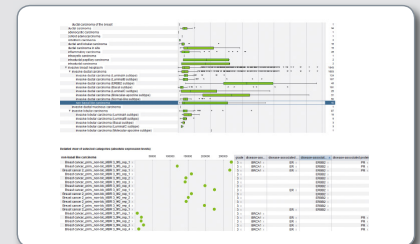
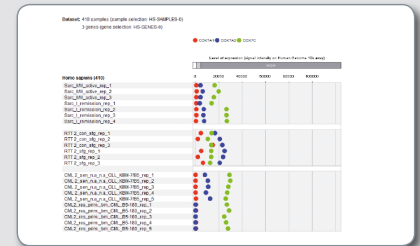
- Cluster genes according to their spatio-temporal-response regulation
- Identify genes co-expressed with a target across tissues or across relevant conditions selected from thousands of tested conditions

Better plan your experiments

- Checking the expression of your genes of interest in a wide variety of contexts leads to ideas for designing new experiments and supports informed decisions.

Connect genes with conditions and phenotypes

- Reposition drugs: find novel areas of involvement of drug targets by contextual meta-analysis
- Find novel interactions: the GENEVESTIGATOR database contains transcriptomic data from a wide variety of biological contexts, including 180 diseases from 28 therapeutic areas. Detailed experimental descriptions allow finding novel connections between genes, conditions and phenotypes.



Contact us

Nebion AG
Hohlstrasse 515
8048 Zurich, Switzerland

Phone +41 44 500 44 00
sales@nebion.com