

About Toxys

Toxys is a Dutch biotech company that offers a broad spectrum of innovative *in vitro* toxicology assays. We are experts in the field of genetic and developmental toxicology with unique technology to provide insight into the mode-of-action of compounds. We are dedicated to bringing relevant information to our clients on potential human health hazards of drugs, chemicals and other substances.

Portfolio

Genotoxicity

Mode-of-action

- **ToxTracker assay**
- **ToxTracker ACE**
- ROS scavenger assay
- Biomarker expression assay

Chromosomal damage

- *in vitro* micronucleus test
- *In vitro* Comet assay
- FPG-modified Comet assay

Mutagenesis

- Hprt mutation assay

DNA repair assays

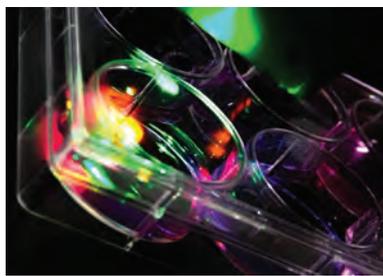
- Base excision repair
- Nucleotide excision repair
- Non-homologous end joining
- Homologous recombination
- DNA mismatch repair
- Translesion DNA synthesis

Developmental Toxicity

- **ReproTracker**
- ToxTracker assay
- Biomarker expression assays
- Mouse EST test

Cytotoxicity

- Alamar blue assay
- Clonogenic survival assay
- Apoptosis assay



Extensive experience in testing:

- Chemicals
- Cosmetic ingredients
- Metals
- Pharmaceuticals
- Tobacco and reduced risk products
- Flavours and Fragrances
- Food contact materials
- Resins & other difficult solvable compounds
- Nanomaterials

Your trusted partner in toxicology

Services

We offer our portfolio assays as a tailored service from our state-of-the-art laboratory in the Netherlands. You can have your compounds tested at Toxys with a typical turnaround time of 2 weeks. We discuss each project with our sponsors to provide detailed expert interpretation of the test results. During the last years we have been working together with many of the top 10 pharma, chemical and cosmetics companies.



Our assays in your lab

ToxTracker and ToxTracker ACE are also available under a license or as a kit. We ensure successful installation and provide on-side training so you can perform our unique assays in your lab.

Collaboration

Our R&D team is continuously developing novel cell-based assays to get insight into the mechanism of toxicity of novel chemicals and pharmaceuticals. We believe that collaboration and excellent science can speed up development of novel and improved in vitro toxicity assays. We welcome opportunities for partnerships.



“At Toxys, we strongly believe in bringing high quality information to our partners and clients. The future for human safety assessment is not with simple tests that only provide a yes-or-no answers, but advanced in vitro models that provide reliable and relevant insight into the Mechanism-of-Action of novel chemicals and materials. We are committed to support our partners in understanding their latest compounds and in making the right decisions during R&D of novel products.”

– G. Hendriks (CEO Toxys)



Core technologies

Toxys has long-standing expertise in generating mammalian cell reporter systems. We have adopted and created a wide spectrum of reporters in various cell lines, including different stem cell lines. For reporter cell line generation, we apply various genome editing technologies, including standard gene promoter cloning, bacterial artificial chromosomes and CRISPR/Cas-mediated genome engineering. The expertise on reporter systems is complemented with the extensive experience in working with both mouse and human stem cells. The combination of these technologies has resulted in the development of ToxTracker and ReproTracker, our unique mechanistic assays.