The **TOXTRACKER® assay**

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**BACKGROUND INFORMATION**

**Highly sensitive and specific**
A unique combination of fluorescent reporter genes in stem cells allows accurate identification of genotoxic carcinogens.

**Rapid, easy and reliable**
Easy and highly quantitative detection of GFP reporter induction by flow cytometry.

**Mechanistic insight in toxicity**
A panel of selected reporters unveil the cellular stress signalling pathways that are activated upon exposure.

**Various toxic responses in a single assay**
ToxTracker discriminates between direct DNA damage, oxidative stress and protein damage as primary toxic response.

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**PROTOCOL**

**Dilutions**
Typically 5-serial dilutions, 2-fold increased.

**Reporter cell lines**
Six reporter cell lines for DNA damage, oxidative stress and protein unfolding.

**Exposure to test compound**
Typically 24 hours exposure, but other exposure times are possible.

**Quality controls**
Standard test includes cisplatin (DNA damage), diethyl mateate (oxidative stress), tunicamycin (protein unfolding) and aflatoxin B1 (metabolism).

**Compound requirements**
<10 mg of compound is needed, provided as dry powder or in solution (typically DMSO, but other solvents are possible).

**Metabolising system**
We can add S9 liver extract.

**Analysis method**
We will use flow cytometry to determine effects. We use the state-of-the-art Guava system.

**Data reporting**
We use our ToxPlot software to analyse results and together with the expert interpretation from our scientist you will receive a full report within 2 weeks. Data which is included:
- Extensive cytotoxic profile
- Assessment of mechanism of genotoxicity
- EC 10/25/50 and LC 10/25/50 calculations
- Toxicity profile in absence or presence of metabolising system
- Comparison to ToxTracker profile to reference compounds

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Visit www.toxys.com or contact enquiries@toxys.com
REFERENCES


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