

Our standard cytotoxicity test examines a test material (either chemicals, pharmaceuticals, or material extracts) for cytotoxic effects which correlate to an acute toxicity. As cell model, all of our cell types can be used in the test. The standard read-out is the XTT test, which is performed according to ISO 10993-5 with minor modifications. In this test, cell viability is measured by metabolic conversion of XTT by viable cells will lead to a colored Formazan product which is measured photometrically\*. Other read-outs, like Neutral Red Uptake (see also our Cor.At Tox test), MTT, Alamar Blue, and LDH release, are possible.

The test is predictive of acute toxicity, because the cytotoxicity of a compound or test material correlates to acute LD50 values\*\*.

\* Scudiereo D et al. 1988. Evaluation of a soluble tetrazolium/formazan assay for cell growth and drug sensitivity in culture using human and other tumor cell lines. Cancer Res. 48(17):4827-33

\*\* Halle W 2003. The Registry of Cytotoxicity : toxicity testing in cell cultures to predict acute toxicity ( LD50 ) and to reduce testing in animals. Altern Lab Anim . 31(2):89-198