

## IN CYTOTOX

# XTT TETRAZOLIUM HYDROXIDE

## APPLICATIONS

Colorimetric assay for the quantification of the mitochondrial metabolism and respiratory chain activity of cells in response to pharmaceutical, chemical and environmental compounds, and nutrients.

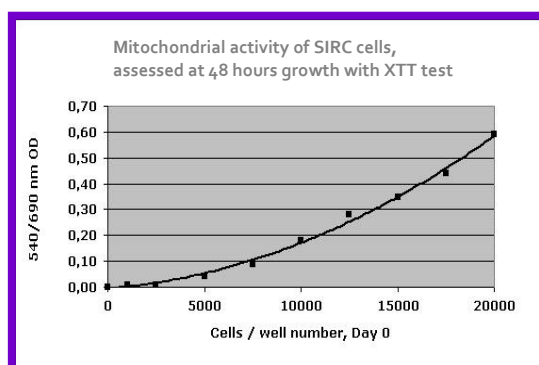
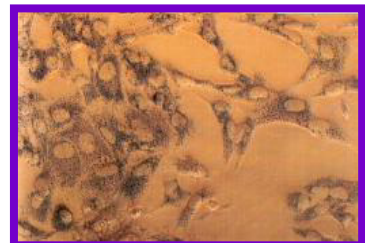
## PRINCIPLE

The tetrazolium salt XTT can be used to measure the metabolic activity of viable cells. Tetrazolium salts are reduced to formazan by mitochondrial succinate dehydrogenase, an enzyme which is only active in cells with an intact metabolism and respiratory chain. The formazan is quantified photometrically and correlates with the number of viable cells.

The XTT formazan product is water soluble. The XTT assay needs therefore no solubilization step which allows to obtain results typically after about 3 hr (depending on incubation length).

## BIOLOGICAL PARAMETERS EVALUATION

- $IC_{50}$  (Inhibitory Concentration 50%)
- Metabolic cytotoxicity
- Respiratory chain activity



# TECHNICAL SPECIFICATIONS

- Absorbance:** - 480 (optimum) or 450 nm
- Approximate assay time:** - 3 hrs 10 min (depending on the cell line)
- Kit content:**
- Substrate solution
  - Buffer solution
  - Instruction manual

## KIT SIZES AND REFERENCE NUMBERS

REFERENCE NO.	NUMBER OF TESTS
KXT96.1200	1200
KXT96.2400	2400

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Xenometrix AG  
Gewerbstrasse 25  
CH-4123 Allschwil  
Switzerland  
Tel.: + 41 61 482 14 34  
Fax: + 41 61 482 20 72  
Email: [info@xenometrix.ch](mailto:info@xenometrix.ch)  
Web: [www.xenometrix.ch](http://www.xenometrix.ch)

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ANIARA DIAGNOSTICA LLC  
+1 (513) 770-1991 | +1 (866) 783-3797  
7768 Service Center Drive  
West Chester, OH 45069  
[info@aniara.com](mailto:info@aniara.com)