

Cellular viability using the MTT assay

Created on: 10-10-2019 - Last modified on: 08-11-2019

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Organisation

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Geographical Area Flemish Region

SCOPE OF THE METHOD

| | |
|--|--------------------|
| The Method relates to | Human health |
| The Method is situated in | Basic Research |
| Type of method | In vitro - Ex vivo |
| Species from which cells/tissues/organs are derived | Diverse |
| Type of cells/tissues/organs | Diverse |

DESCRIPTION

Method keywords

cell culture
cell viability test
MTT cytotoxicity assay

Scientific area keywords

toxicity testing
viability study

Method description

Cells are treated with compounds and after a specific incubation time the MTT reagent is added. In living cells, the MTT is reduced to the purple formazan. The amount of formazan is related to the amount of living cells. Next, the medium and MTT reagent are aspirated and DMSO is added after which the purple solution is quantified using UV-VIS.

Lab equipment

Cell incubator ;

UV-VIS spectrophotometer (or microplate reader).

Method status

Published in peer reviewed journal

PROS, CONS & FUTURE POTENTIAL

Advantages

Enables high-throughput screening.

Challenges

No insights in cell death mechanisms (apoptosis, necrosis,...).

REFERENCES, ASSOCIATED DOCUMENTS AND OTHER INFORMATION

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