

Nov 01, 2023

MTT assay

DOI

<https://dx.doi.org/10.17504/protocols.io.e6nvwdoqwlmk/v1>

alexron¹

¹University of Cambridge



Alexander Röntgen

University of Cambridge

Create & collaborate more with a free account

Edit and publish protocols, collaborate in communities, share insights through comments, and track progress with run records.

Create free account

OPEN  ACCESS



DOI: <https://dx.doi.org/10.17504/protocols.io.e6nvwdoqwlmk/v1>

Protocol Citation: alexron 2023. MTT assay. protocols.io <https://dx.doi.org/10.17504/protocols.io.e6nvwdoqwlmk/v1>

License: This is an open access protocol distributed under the terms of the **Creative Commons Attribution License**, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Protocol status: Working

We use this protocol and it's working

Created: November 01, 2023

Last Modified: November 01, 2023



Protocol Integer ID: 90238

Keywords: protocol for mtt cytotoxicity, mtt cytotoxicity, sy5y cell, mtt, assay

Abstract

Protocol for MTT cytotoxicity assay on SH-SY5Y cells.

Materials

- Medium: DMEM/F-12, GlutaMAXTM (ThermoFisher Scientific) + 10% Fetal Bovine Serum (GibcoTM)
- Trypsin-EDTA (0.25%) (ThermoFisher Scientific)
- PBS, pH 7.4 (ThermoFisher Scientific)
- RPMI medium (ThermoFisher Scientific)
- MTT kit (Abcam)
- 96-well plates, PS, F-bottom (Greiner Bio-One)
- Plate shaker
- Plate reader for absorbance measurement



General

- 1 Culture human SH-SY5Y cells at 37 °C and 5% CO₂

Day 1

- 2 Detach 80–90% confluent cells with Trypsin-EDTA
- 3 Count cells and seed 10000 cells/well
- 4 Incubate at 37 °C and 5% CO₂ for 24 h

Day 2

- 5 Aspirate medium from cells
- 6 Add in protein solutions
- 7 Place back at 37 °C and 5% CO₂ for 24 h

Day 3

- 8 Dilute MTT 1:10 in RPMI medium
- 9 Aspirate medium from cells
- 10 Add 100 µL MTT/RPMI solution per well



- 11 Place back at 37 °C and 5% CO₂ for 4 h
- 12 Aspirate medium from cells
- 13 Add 100 µL stop solution per well
- 14 Incubate at 37 °C, 500 rpm on plate shaker
- 15 Read out absorbance at 570 nm on plate reader