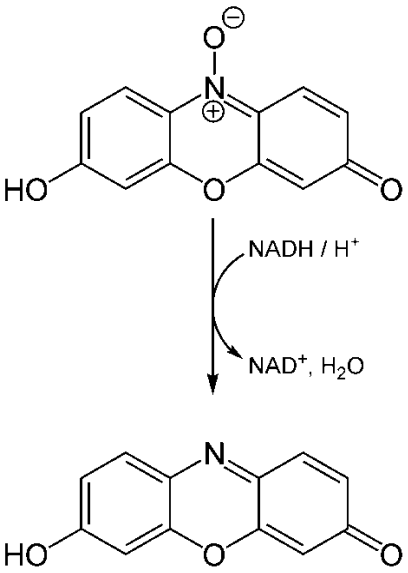
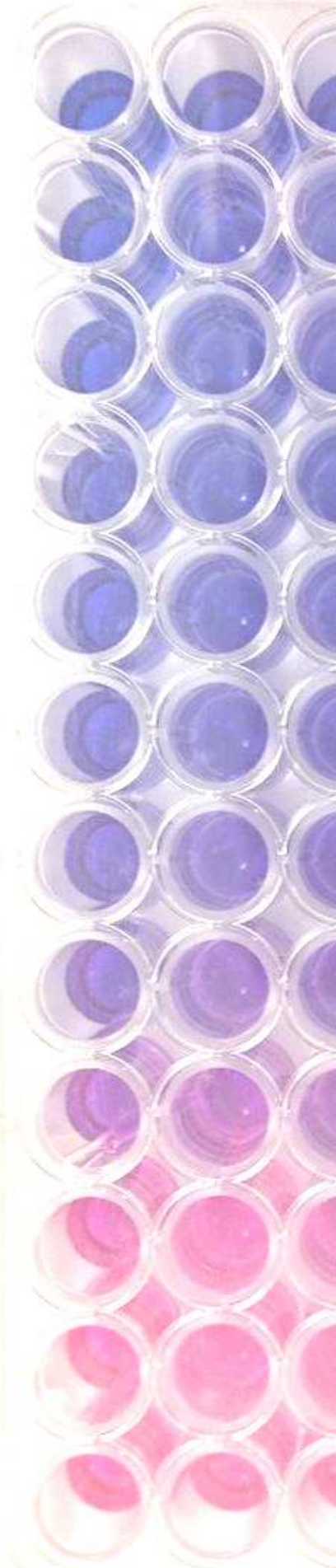
OZBlue Cell Viability Kit

INSTRUCTION MANUAL



Resazurin

Resorufin



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OZBlue – Cell Viability Kit

Instruction Manual

The OZBlue Cell Viability kit is a ready-to-use assay system based on fluorimetric/colorimetric quantification of metabolic activity in living cells. The Resazurin dye is used as an indicator of cell viability.

Catalog Number	Description	Volume (mL)	Number of test (96 well plate)
BL00025	OZBlue Cell Viability Kit	25 mL	2,500
BL00100	OZBlue Cell Viability Kit	100 mL	10,000

You can order this product by contacting us. For all other additional information, do not hesitate to contact our dedicated technical support (tech@ozbiosciences.com).

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1. Technology

1.1. Description

The OZBlue Cell Viability Kit is a fluorescent and colorimetric assay measuring the activity of dehydrogenase enzymes in metabolically active cells. These enzymes reduce the blue/non fluorescent resazurin dye to pink/fluorescent resorufin (Fig. 1). The fluorescent/colorimetric signal produced is directly proportional to the number of living cells.
We preferentially recommend quantifying fluorescence signal, which is more sensitive and has a broader detection range than colorimetric method.

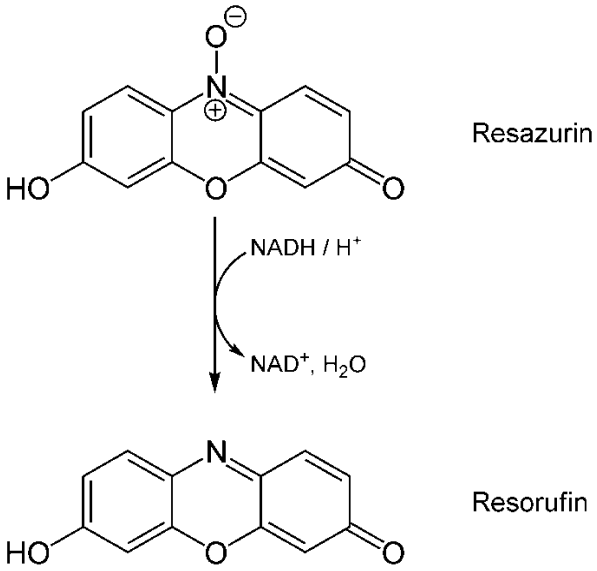


Figure 1: Resazurin reduction to resorufin in metabolically active cells

Fluorimetric measurement at 530-560 nm excitation wavelength / 590-620 nm emission wavelength or spectrophotometric measurement at 570 nm or allows quantization of viable cells and can be used as a direct indicator of cytotoxicity, viability, migration and invasion.

Measurement of cell viability or proliferation can be performed directly with living cells. The OZBlue Cell Viability Kit does not need cell fixation, cell lysis or washing steps rendering this kit fast, ready-to-use, accurate, sensible and adapted to high throughput screening.

1.2. Shipping and storage

Shipping condition	Shipped with ice pack
Storage	Upon receipt, store the OZBlue Cell Viability Kit solution at 4°C. The kit is stable for at least 1 year at the recommended storage temperature.

2. Protocols

2.1. General considerations

- Check that your cell culture medium does not contain components that may interfere with Resazurin reduction such as HEPES, glutathione or ascorbic acid.
- OZBlue Cell Viability Kit solution is light sensitive: protect the reagent from direct daylight.

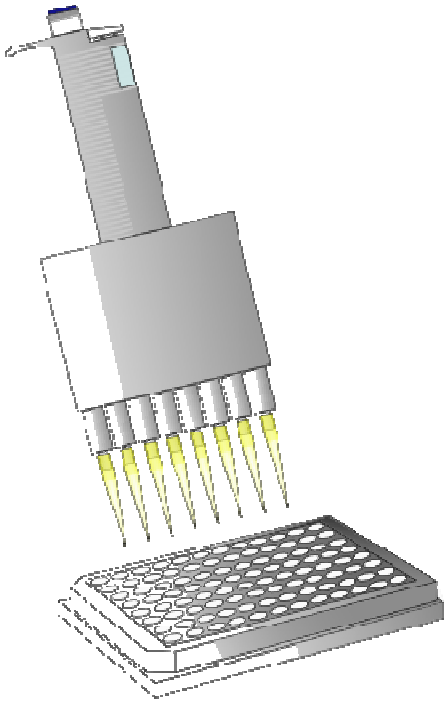
2.2. General protocol

1. Plate your cells in a 96 or 384 **opaque-walled** cell culture plate (clear bottom).
2. Perform your experiment.
3. Bring OZBlue Cell Viability Kit solution to room temperature.
4. Add directly into the cell medium a volume equal to 10% of the cell culture volume of OZBlue Cell Viability Kit.
5. Incubate 30 min to 4 h in your standard cell culture conditions (incubation time may vary depending on the metabolic activity of the cells).
6. Measure the Fluorescence (560 nm_{Ex}/590 nm_{Em}) or the Absorbance (570 nm).

Notes:

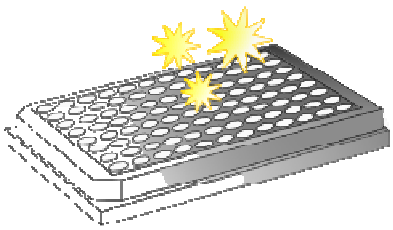
- For large samples (24 well-plate or larger), after incubation time (step 5), collect 100µL of cell culture medium and transfer it in a 96 well-plate before measurement in the plate reader.
- Cells growing in suspension may need a longer incubation time than adherent cells.
- Multiple measurements at different time points can be done to determine the optimal incubation time for your cell culture conditions.
- For colorimetric measurement, Absorbance at 600 nm can be subtracted for background correction.

2.3. Quick protocol for 96-well plates



- Add 10µL of OZBlue Cell per well

- Incubate 30min to 4h at 37°C



- Read the signal using a Fluorescent Plate Reader (560 nm_{Ex}/590 nm_{Em}) or a Spectrophotometer (570 nm)

3. Related Products

Description
ASSAY KITS
Luciferase Expression Dosage
MTT cell proliferation kit
Bradford – Protein Assay Kit
β-Galactosidase assay kits (CPRG/ONPG)
MAGNETOFECTION TECHNOLOGY
Super Magnetic Plate *(standard size for all cell culture support)* Mega Magnetic plate *(mega size to hold 4 culture dishes at one time)*
Transfection reagents:
PolyMag Neo (*for all nucleic acids*)
SilenceMag *(for siRNA application)*
NeuroMag *(dedicated for neurons)*
Transfection enhancer:
CombiMag *(to improve any transfection reagent efficiency)*
Viral Transduction enhancers:
ViroMag (*to optimize viral transduction*)
ViroMag R/L *(specific for retrovirus and Lentivirus)*
AdenoMag *(for Adeno viruses)*
LIPOFECTION TECHNOLOGY (LIPID-BASED)
Lullaby (*siRNA transfection reagent)*
DreamFect Gold *(Transfection reagent for all types of nucleic acids)*
Ecotransfect *(Economical reagent for routine transfection)*
FlyFectin *(for Insect cells)*
VeroFect *(for Vero cells)*
I-MICST TECHNOLOGY
Viro-MICST (*to transduce directly on magnetic cell purification columns)*
3D TRANSFECTION TECHNOLOGY
3Dfect *(for scaffolds culture)*
3DfectIN *(for hydrogels culture)*
RECOMBINANT PROTEIN PRODUCTION
HYPE-5 Transfection Kit (*for **H**igh **Y**ield **P**rotein **E**xpression)*
PROTEIN DELIVERY SYSTEMS
Ab-DeliverIN *(delivery reagent for antibodies)* Pro-DeliverIN *(delivery reagent for protein in vivo and in vitro)*
PLASMIDS PVECTOZ
pVectOZ-LacZ 25µg pVectOZ-SEAP 25µg
BIOCHEMICALS
D-Luciferin, K^+ and Na^+ 1g G-418, Sulfate 1g X-Gal powder 1g

Do not hesitate to contact us for all complementary information and remember to visit our website in order to stay inform on our last breakthrough technologies and updated on our complete product list. http://www.ozbiosciences.com

Purchaser Notification

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