Cell growth assay

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Working

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EXTERNAL LINK

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THIS PROTOCOL ACCOMPANIES THE FOLLOWING PUBLICATION

Sumi C, Matsuo Y, Kusunoki M, Shoji T, Uba T, Iwai T, Bono H, Hirota K (2019) Cancerous phenotypes associated with hypoxia-inducible factors are not influenced by the volatile anesthetic isoflurane in renal cell carcinoma. PLoS ONE 14(4): e0215072. doi: 10.1371/journal.pone.0215072

BEFORE STARTING

Cell growth was assessed using a CellTiter 96® AQueous One Solution Cell Proliferation Assay (Promega, Madison, WI, USA). This assay measured the reduction of the tetrazolium compound MTS (3-[4,5-dimethyl-2-yl]-5-[3-carboxymethoxyphenyl]-2-[4-sulfophenyl]-2H-tetrazolium, inner salt).

1 Cells were seeded into 96-well plates and cultivated for indicated time periods

2 20 µl of CellTiter 96® AQueous One Solution Reagent was added to each well.

3 The plates were incubated at 37 °C for 1 h prior to measuring the absorbance of each sample using an iMark™ Microplate Reader (BIO-RAD, Hercules, CA, USA) at a wavelength of 490 nm.

4 Cell viability was then calculated by comparing the absorbance of the treated cells with that of the control cells, with the latter defined as 100%.

All samples were assayed in triplicate or quadruplicate for each experiment.