

Datasheet for ABIN1607920

RadChemDosi™ Cell Survival Assay Kit**2** Images[Go to Product page](#)

Overview

Quantity:	1 kit
Application:	Cell Viability Assay (CVA)

Product Details

Brand:	RadChemDosi™
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Target Details

Background:	<p>RadChemDosi™ Cell Survival Assay Kit is a chemical based assay that can measure the dose rate of ionizing radiation. Radiation mainly works by producing free radicals that reacts with biomolecules (DNA, protein and lipid) in mammalian and other types of cells. The amount of free radicals produced by radiation is dependent on the dose. RadChemDosi™ is an effective way to measure dose rate for ionizing radiation. It is a chemical-based assay that uses the ability of ionizing radiation to induce changes in certain chemicals. RadChemDosi™ is useful for blood irradiators where it can be used for periodic calibration and to determine the dose given to blood by simultaneously irradiating RadChemDosi™ in small disposable tubes attached to the blood sample by taping the tubes outside the bag. Synonyms: Radiation dosing assay, Gamma radiation assay, dosimetry solution for gamma radiation, cell death assay, cell survival, to measure ionizing radiation.</p>
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Application Details

Application Notes:	<p>RadChemDosi™ Cell Survival Assay Kit contains enough reagents for 100 test if 1 ml is used for irradiation. RadChemDosi™ is sensitive to measure the dose rate as low as 2.5Gy/min at various positions in a Cesium irradiator chamber. In addition to calibrating the dose rate at each position in a radiation chamber periodically, it can also be used to measure the dose rate in</p>
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Application Details

each well of a 6 and 24 wells plate.

Restrictions: For Research Use only

Handling

Storage: 4 °C

Storage Comment: Store Kit at 4-8° C prior to opening. See kit insert for complete instructions.

Expiry Date: See kit insert for complete instructions.

Images

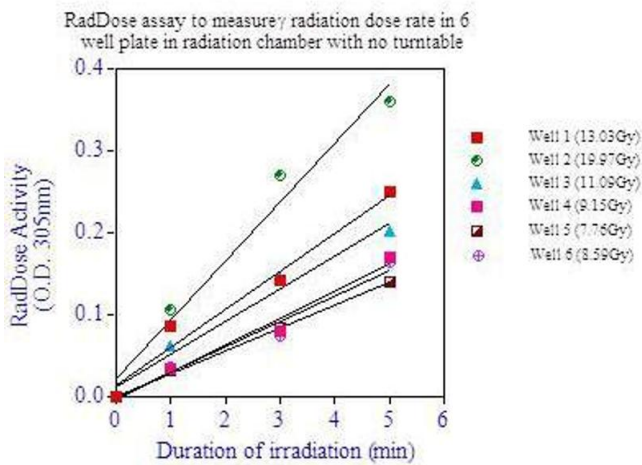


Image 1. RadChemDosi™ is an effective way to measure dose rate for ionizing radiation. In addition to calibrating the dose rate at each position in a radiation chamber periodically, it can also be used to measure the dose rate in each well of a 6 and 24 wells plate. Measurement of gamma dose rate with in 6 well plates. Dose Rate with the turntable on: Position 2- 360.28rads/min or 3.60Gy/min for each well. $y=0.013x+0.000$ $r^2=1.000$ (each).

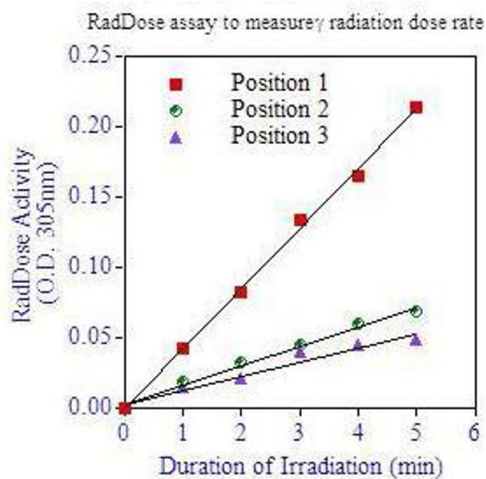


Image 2. RadChemDosi™ Cell Survival Assay to measure gamma radiation dose rate by producing free radicals that reacts with biomolecules in mammalian and other types of cells. $y=0.043x+0.000$ $r^2=0.998$; $y=0.014x+0.003$ $r^2=0.990$; $y=0.010x+0.004$ $r^2=0.945$. Dose rate with turn table on: Position 1- 1193.82rads/min or 11.92Gy/min. Position 2- 388.36 rads/min or 3.88Gy/min. Position 3- 277.4rads/min or 2.774Gy/min.