Datasheet for ABIN1607919

Oxphos™ Cell Survival Assay Kit

2 Images

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Overview

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

Product Details

Brand:	Oxphos™

Target Details

Background:	OxPhos™ is a medium based metabolic probe that can measure glutathione recycling capacity/glutathione function and glucose dependent antioxidant capacity of cells in tissue culture and whole blood. Oxphos™ is based on the ability of mammalian cells to rapidly and efficiently convert hydroxyethyl disulfide (HEDS) into mercaptoethanol (ME) through a bioreduction mechanism. Bioconversion of HEDS to ME relies on the activity of the oxidative pentose phosphate cycle (OPPC). OxPhos™ measures ME in the extracellular medium without the need for cellular lysis and extraction methods. Cell media is used in the assay, avoiding the need to lyse cells and thereby saving time and cost while preserving the ability to perform other cellular tests in the same culture system. OxPhos™ may have multiple applications in aging, oxidative stress, antioxidant screening, chemotherapy response and toxicology. Synonyms: Glutathione recycling, glutathione function, and glucose dependent antioxidant capacity assay, cell viability, cell survival cellular viability, cellular survival, antioxidant assay

Application Details

Application Notes:	Oxphos™ gives a linear response for mammalian cells (0, 100.000, 200.000, 400.000, 600.000, and 800.000) plated in 1mL growth medium in a six well plate with up to 15% fetal bovine serum and measured 20 hours after plating. It also gives a linear response for human blood (0,

Application Details

	10, 20, 40, 60, 80, 100 µL) suspended in a total volume of 200 µL saline in a microfuge tube and incubated with 10 µL of reagent 6 for 2hrs. Oxphos™ contains enough reagents for 100 assays using a a 6-well plate.
Restrictions:	For Research Use only

Handling

Storage:	4 °C
Storage Comment:	Store kit at 2-8° C prior to opening. See kit insert for complete instructions.
Expiry Date:	See kit insert for complete instructions.

Images

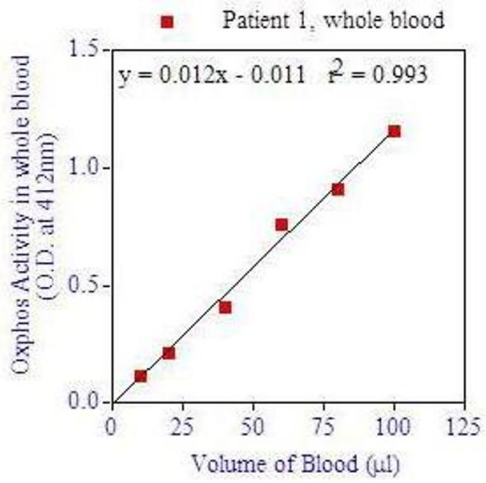

Image 1. OxPhos™ gives a linear response for human blood (0, 10, 20, 40, 60, 80, 100 µL) suspended in a total volume of 200 µL saline in a microfuge tube and incubated with 10 µL of reagent 6 for 2hrs. is a medium based metabolic probe that can measure glutathione recycling capacity/glutathione function and glucose dependent antioxidant capacity of cells in tissue culture and whole blood.

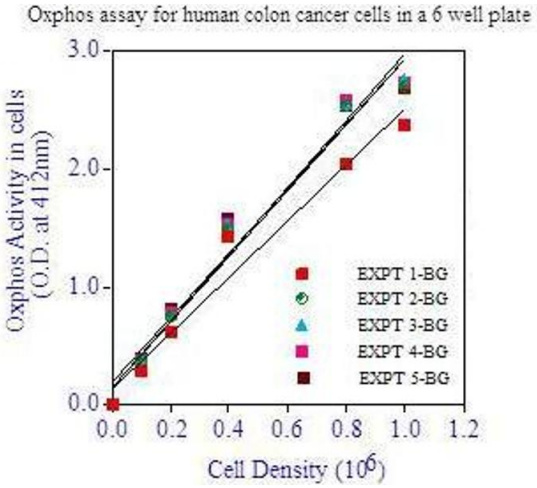

Image 2. OxPhos™ Cell Survival Assay for human colon cancer cells in a 6 well plate. This assay gives a linear response for mammalian cells (0; 100,000; 200,000; 400,000; 600,000; and 800,000) plated in 1mL growth medium in a six well plate with up to 15% fetal bovine serum and measured 20 hours after plating. The background (BG) O.D. is between 0.231-0.235 that is subtracted from the data for each of the cell density. A mean r2 values of 0.97 demonstrate the dynamic range up to 1 million cells. y=2.376x+0.138 r2=0.964. y=2.774x+0.158 r2=0.976. y=2.819x+0.163 r2=0.976. y=2.814x+0.164 r2=0.973.

Images

y=2.736x+0.199 r2=0.965.