

Product datasheet

Adipogenesis Detection Assay Kit (Colorimetric/Fluorometric) ab102513

9 References 5 Images

Overview

Product name	Adipogenesis Detection Assay Kit (Colorimetric/Fluorometric)
Detection method	Colorimetric/Fluorometric
Sample type	Tissue, Adherent cells, Suspension cells
Assay type	Quantitative
Sensitivity	> 0.2 nM
Range	0.2 nM - 10 nM
Assay time	0h 40m
Product overview	Adipogenesis Detection Assay Kit (Colorimetric/Fluorometric) (ab102513) quantifies triglyceride accumulation in cells and tissues. In the assay, triglycerides are efficiently solubilized then hydrolyzed to glycerol which is subsequently oxidized to convert the probe to generate color (OD _{max} = 570 nm) and fluorescence (Ex/Em = 535/587 nm). The kit can detect 0.2 - 10 nmol of triglyceride in <1,000 differentiated 3T3-L1 cells. The high detection sensitivity and the convenient microplate assay format make the kit a convenient tool for studying the effect of adipogenesis inducers or to screen inhibitor compounds.

Visit our [FAQs page](#) for tips and troubleshooting.

Notes This product is manufactured by BioVision, an Abcam company and was previously called K610 Adipogenesis Colorimetric/Fluorometric Assay Kit. K610-100 is the same size as the 100 test size of ab102513.

Adipogenesis is the process of differentiation of different cell types into adipocytes, the primary fat storage cell type. The accumulation of adipocytes is the basis for obesity, a significant risk factor in many diseases, including diabetes, atherosclerosis, cancer and cardiovascular disease, etc. Adipocytes accumulate triglycerides, in the form of lipid droplets which can be measured.

Platform Microplate reader

Properties

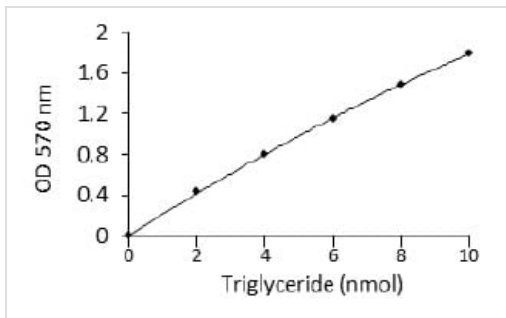
Storage instructions Store at -20°C. Please refer to protocols.

Components	Identifier	100 tests	2000 tests
Adipogenesis Assay Buffer	WM	1 x 25ml	20 x 25ml
Adipogenesis Enzyme Mix	Green	1 vial	20 vials
Adipogenesis Probe (in DMSO solution)	Red	1 x 200µl	20 x 200µl
Lipase	Orange	1 vial	20 vials
Lipid Extraction Solution	NM	1 x 10ml	20 x 10ml
Triglyceride Standard	Yellow	1 x 0.3ml	20 x 0.3ml

Relevance

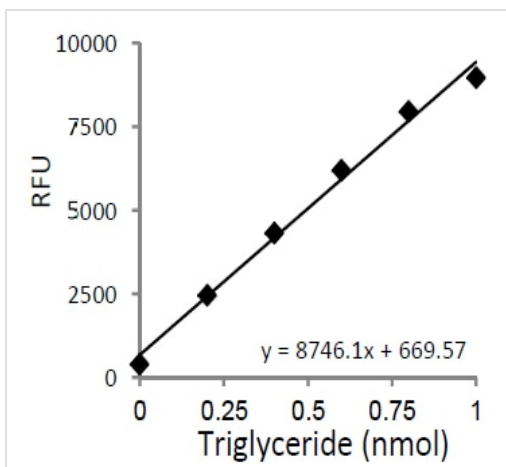
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Images



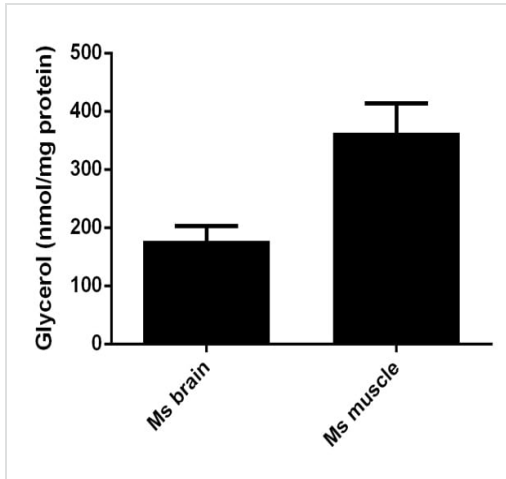
Example of a standard curve obtained with ab102513.

Functional Studies - Adipogenesis Detection Kit (ab102513)



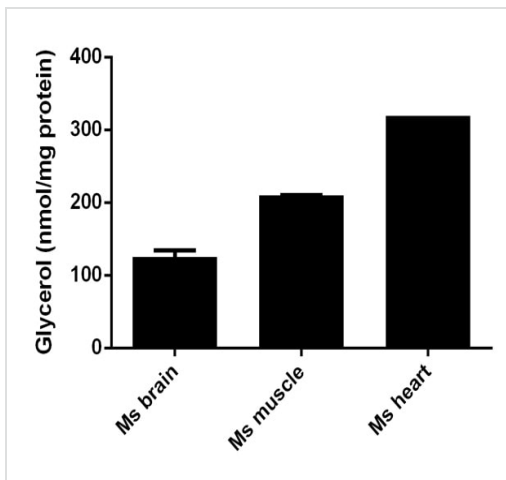
Example of a standard curve obtained with ab102513.

Functional Studies - Adipogenesis Detection Kit (ab102513)



Glycerol measured fluorometrically in mouse tissue lysates showing quantity (nmol) per mg protein of tested sample

Functional Studies - Adipogenesis Detection Kit
(ab102513) - Fluorometric



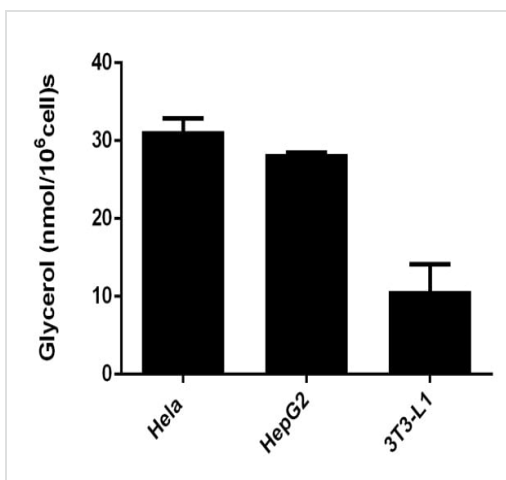
Glycerol measured colourimetrically in mouse tissue lysates showing quantity (nmol) per mg protein of tested sample.

Ms brain value retrieved from 1:9 dilution of original 12.4mg/mL sample.

Ms muscle value retrieved from 1:9 dilution of original 7.5mg/mL sample.

Ms heart value retrieved from 1:27 dilution of original 16.4mg/mL sample.

Functional Studies - Adipogenesis Detection Kit
(ab102513) - Colourimetric



Glycerol measured colourimetrically in cell lysates showing quantity (nmol) per 1 mln of tested cells

Functional Studies - Adipogenesis Detection Kit
(ab102513) - Colourimetric

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