abcam

Product datasheet

Glycogen Assay Kit ab65620

135 References 画像数 4

製品の概要

製品名	Glycogen Assay Kit
検出方法	Colorimetric/Fluorometric
サンプルの種類	Cell culture supernatant, Urine, Other biological fluids, Tissue
アッセイタイプ	Quantitative
検出感度	> 0.04 µg/ml
検出範囲	40 ng/well - 2000 ng/well
全工程の試験時間	1h 00m
製品の概要	Glycogen Assay Kit ab65620 is an easy and accurate assay to measure glycogen levels in biological samples. In the glycogen assay protocol, glucoamylase hydrolyzes the glycogen to glucose which is then specifically oxidized to produce a product that reacts with OxiRed probe to generate color (570 nm) and fluorescence (Ex 535/Em 587). The assay can detect glycogen 0.04 to 2 µg/well. Glycogen assay protocol summary: - add samples and standards to wells - add hydrolysis enzyme mix and incubate for 30 min - add reaction mix and incubate for 30 min - analyze with microplate reader If your sample is likely to contain reducing substances, we recommend using **Glycogen Assay Kit II (ab169558)**, as reducing substances may interfere with the assay detection method.
特記事項	This product is manufactured by BioVision, an Abcam company and was previously called K646 Glycogen Colorimetric/Fluorometric Assay Kit. K646-100 is the same size as the 100 test size of ab65620. Review our **Metabolism Assay Guide** to learn about assays for metabolites, metabolic enzymes, mitochondrial function, and oxidative stress, and also about how to assay metabolic function in live cells using your plate reader. **How other researchers have used Glycogen Assay Kit ab65620** The glycogen assay kit has been used in publications in a variety of sample types, including: - Human: muscle tissue[1] - Mouse: muscle tissue lysates[2], muscle and liver tissue[3], liver[4], cultured muscle myotubes[5],

astrocyte primary cell lysates[6],
- Rat: liver[7], neuron-astrocyte co-cultures[8]
- Bacteria: *M. buryatense*[9], *Haemophilus influenzae*[10]

References: 1 - Vaughan D et al 2016, Trewin AJ et al 2015; 2 - Baligand C et al 2017, Riedl et al 2016, Wicks SE et al 2015, Todd AG et al 2015, Lundell LS et al 2019, Kim HY et al 2016, Amoasii et al 2016; 3 - Xirouchaki CE et al 2016, Pamir N et al 2015, Zachwieja NJ et al 2016; 4 - Pursell et al 2018; 5 - Park M et al 2016; 6 - Choudhury GR et al 2015; 7 - Xiang L et al 2014, Guo J et al 2018; 8 - Sobieski C et al 2018; 9 - Puri AW et al 2015; 10 - Wu S et al 2014

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It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

試験プラットフォーム Microplate reader

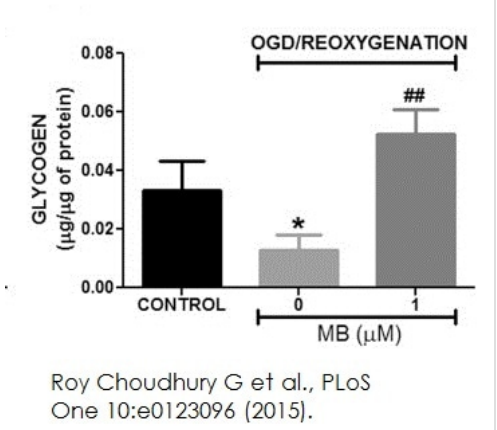
製品の特性

保存方法 Store at -20°C. Please refer to protocols.

内容	100 tests	2000 tests
Assay Buffer Ⅱ	1 x 25ml	20 x 25ml
Assay Buffer Ⅷ	1 x 25ml	20 x 25ml
Development Enzyme Mix Ⅱ	1 vial	20 vials
Glycogen Standard	1 x 100µl	20 x 100µl
Hydrolysis Enzyme Mix Ⅰ	1 vial	20 vials
OxiRed Probe	1 x 200µl	20 x 200µl

関連性 Glycogen is the primary short term energy storage molecule in animals. It is synthesized primarily in the liver and muscle. Glycogen is a highly branched polymer of glucose molecules, connected with an alpha-1,4 linkage, branching via an alpha-1,6 linkage. Abnormal ability to utilize glycogen is found in diabetes and in several genetic glycogen storage diseases.

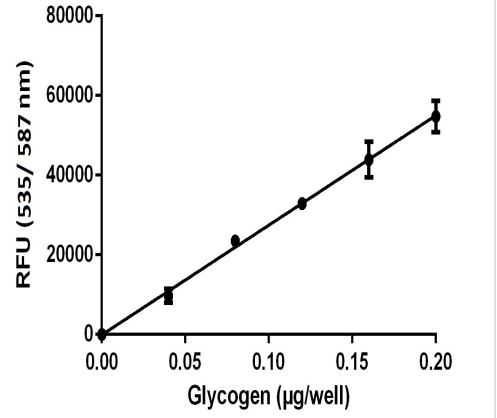
画像



Roy Choudhury G et al., PLoS One 10:e0123096 (2015).

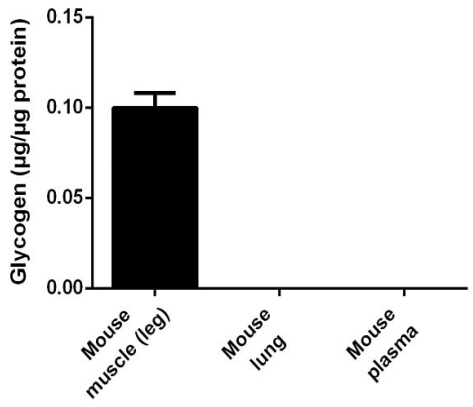
Functional studies - ab65620

Total glycogen levels in C576bL6 mice astrocytes were determined by using Glycogen assay kit (ab65620). At 24 hours following OGD-reoxygenation, astrocytes had less glycogen levels compared to normoxia control. Astrocytes treated with Methylene blue (MB) showed a higher glycogen content compared to non-MB treated, OGD-reoxygenation astrocytes. * $p < 0.05$; ## $p < 0.001$ Vs. OGD-reoxygenation control / 0 µM MB.



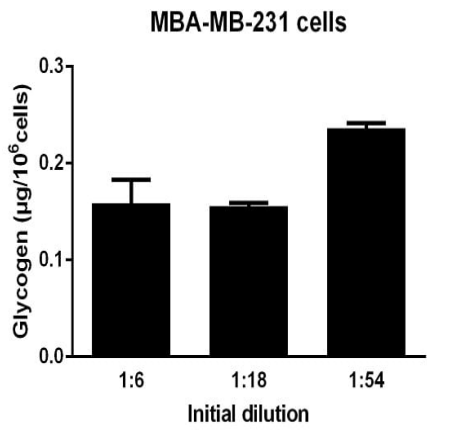
Functional Studies - Glycogen Assay Kit

Example of fluorometric standard curve using Glycogen Assay Kit (ab65620).



Functional Studies - Glycogen Assay Kit (ab65620)

Measurement of glycogen in various mouse tissues using Glycogen Assay Kit (ab65620).



Functional Studies - Glycogen Assay Kit (ab65620)

Glycogen concentration measured in MBA-MB-231 cells (human breast adenocarcinoma cell line). 10^6 cells were prepared following protocol instructions, and several dilutions were measured using fluorometric detection.

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