# abcam

#### Product datasheet

## Triglyceride Assay Kit - Quantification ab65336

★★★★★ 4 Abreviews 449 References 4 图像

#### 概述

产品名称 Triglyceride Assay试剂盒- Quantification

检测方法 Colorimetric/Fluorometric

样品类型 Urine, Serum, Plasma, Other biological fluids, Tissue Extracts, Cell Lysate

检测类型 Quantitative

**灵敏度** > 2 μM

检测时间 1h 20m

产品概述
Triglyceride Assay Kit (ab65336) is a sensitive, easy assay to measure triglyceride concentration in mammalian samples. In the triglyceride assay protocol, triglycerides are converted to free fatty acids and glycerol. Glycerol is then oxidized to generate a product which reacts with a probe to

generate color (spectrophotometry at  $\lambda$ = 570 nm) and fluorescence (Ex/Em = 535/587 nm).

Triglyceride assay protocol summary:

- add samples and standards to wells
- add assay buffer and lipase, and incubate for 20 min
- add triglyceride reaction mix and incubate for 60 min
- analyze with microplate reader

Please note: the general range is 0-10 nmol (colorimetric) and 0-1 nmol (fluorometric).

If your sample contains reducing substances, they are likely to interfere with the assay. In this case, we recommend using <u>Triglyceride Assay Kit (Fluorometric, Reducing samples)</u> <u>ab178780</u>.

#### Target background

Triglycerides are the main constituent of vegetable oil, animal fat, LDL and VLDL, and play an important role as transporters of fatty acids as well as serving as an energy source. Triglycerides are broken down into fatty acids and glycerol, after which both can serve as substrates for energy producing and metabolic pathways. High blood levels of triglycerides are implicated in atherosclerosis, heart disease and stroke as well as in pancreatitis.

Review our **Metabolism Assay Guide** to learn about assays for metabolites, metabolic enzymes,

1

mitochondrial function, and oxidative stress, and also about how to assay metabolic function in live cells using your plate reader.

说明

This product is manufactured by BioVision, an Abcam company and was previously called K622 Triglyceride Quantification Colorimetric/Fluorometric Kit. K622-100 is the same size as the 100 test size of ab65336.

#### How other researchers have used Triglyceride Assay Kit ab65336

The Triglyceride assay kit has been used in publications in a variety of sample types, including:

- Human: serum<sup>1</sup>, plasma<sup>2</sup>, mammary epithelial and mammary cancer cell line lysate<sup>3</sup>, Huh7.5 hepatocyte-derived cell line lysate<sup>4</sup>, primary liver cell line lysates<sup>5</sup>, sebocyte cell culture lysates<sup>6</sup>
- Mouse: hepatocyte cell lysates<sup>7</sup>, liver extract<sup>8</sup>, serum<sup>9</sup>, plasma<sup>10</sup>, kidney extracts<sup>11</sup>, liver tissue and serum<sup>12</sup>, cardiac tissue extracts<sup>13</sup>
- Rat: liver tissue extract<sup>14</sup>, plasma<sup>15</sup>
- Drosophila<sup>16</sup>

References: 1-<u>Huang Y et al. 2019</u>, 2-<u>Wilson et al 2018</u>, 3-<u>Yen MC et al. 2019</u>, 4-<u>Kim D et al. 2018</u>, 5-<u>Boteon Y et al. 2018</u>, 6-<u>Jin S and Lee MY 2018</u>, 7-<u>Zhang W et al. 2019</u>, 8-<u>Brial F et al. 2019</u>, 9-<u>Liu J et al. 2018</u> and <u>Patton A et al. 2018</u>,

- $10-\underline{\textbf{Fernandes et al. 2018}} \text{ and } \underline{\textbf{K\"orholz JC et al 2018}} \text{ and } \underline{\textbf{Liang et al. 2018}}, 11-\underline{\textbf{Ding W et al. 2018}}, 12-\underline{\textbf{Cui XB et al. 2018}}$
- 13-Rohm M et al. 2018, 14-Yu S et al. 2018, 15-García-Ruiz et al. 2018, 16-Wen CA and Ballard JWO 2019

Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances.

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.

Microplate reader

平台

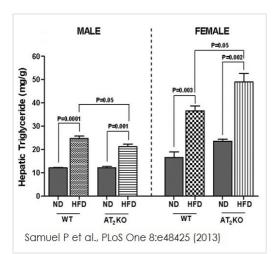
### 性能

#### 存放说明

#### Store at -20°C. Please refer to protocols.

组件	100 tests	2000 tests
Assay Buffer V	1 x 25ml	20 x 25ml
Cholesterol Esterase	1 vial	20 vials
Enzyme Mix VI	1 vial	20 vials
OxiRed Probe	1 x 200µl	20 x 200µl
Triglyceride Standard	1 x 300µl	20 x 300µl

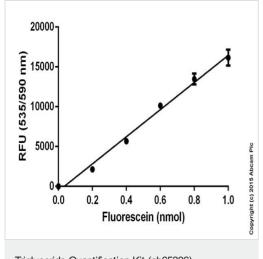
#### 图片



Hepatic triglyceride levels was measured using ab65336 in male and female wild-type (WT) or  $AT_2KO$  (knockout) mice with either normal diet (ND) or high fat diet (HFD).

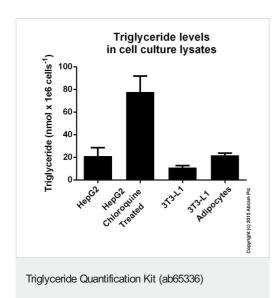
#### Functional studies - ab65336

Image from Samuel P et al., PLoS One 8(1), Fig 7b. doi: 10.1371/journal.pone.0048425. Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/4.0/



Triglyceride Quantification Kit (ab65336)

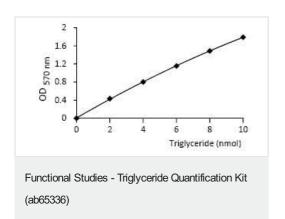
Fluorometric triglyceride standard curve: mean of duplicates (+/-SD) with background reads subtracted



Triglyceride measured in cell culture lysates showing quantity (nmol) per 1 mln cells.

Samples with the concentration of 1e7 cells/mL were used. Samples were diluted 40-80 fold and measured fluorometrically.

HepG2 cells were treated with 25 uM Chloroquine for 72h.



Colorimetric triglyceride standard curve using ab65336.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

#### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you

• We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.cn/abpromise">https://www.abcam.cn/abpromise</a> or contact our technical team.

#### Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors