

Lipid Assay Kit

Lipid Quantification Kit (Fluorometric)

CATALOG #
AAA44630

PRODUCT SYNONYMS

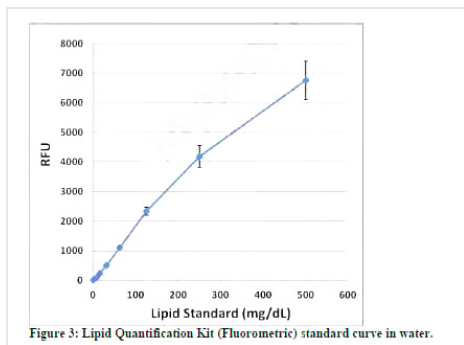
Lipid; Lipid Quantification Kit (Fluorometric); Lipid assay kit

PRODUCT SPECIFICATIONS

Preparation and Storage

Store the kit at 4 degree C.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for Lipid assay kit

Background/Introduction: Lipids are a diverse group of molecules that include monoglycerides, diglycerides, triglycerides, fats, sterols, and others. Not only do lipids define and preserve cellular membrane integrity, but they are also involved in cellular processes such as membrane trafficking, signal transduction, apoptosis, and energy storage. Perturbation in the metabolism of lipids has been linked to many diseases such as cancer, diabetes, Alzheimer's disease, and coronary heart disease. In order to study lipids, they must often be extracted first from tissues or cultured cells. Traditionally, organic extraction by the Folch method (Ref. 1) has been preferred, but this method has several disadvantages. First, it extracts lipids to a bottom organic phase, forcing penetration of the upper protein-containing phase during purification and causing contamination of lipid samples. As a result, low purity lipid samples can hamper downstream lipid analysis by clogging instruments such as high pressure liquid chromatographs (HPLCs). In addition, the Folch method uses chloroform as the organic phase solvent. Long-term exposure to chloroform by inhalation has resulted in effects on the liver such as hepatitis and jaundice. Furthermore, chloroform has been demonstrated to be carcinogenic in animals, causing in an increase in kidney and liver tumors. In fact, the United States Environmental Protection Agency (EPA) has classified chloroform as a Group B2, probable human carcinogen. Lipid Extraction Kit isolates total lipids by organic extraction, but circumvents the above disadvantages by extracting lipids to an upper organic phase (making it amenable to high throughput extraction) that is chloroform free. A crude lipid source such as serum or tissue culture cell pellet is resuspended in a proprietary alcohol. After adding a proprietary organic compound, the mixture is centrifuged to gravitationally separate the phases. The recovered upper organic phase is then dried and resuspended for downstream lipid analysis. Each kit provides sufficient reagents to isolate up to 50 preps based on a 100 uL sample size. Larger sample sizes may be used (see Table 1) yielding proportionally fewer preps per kit.

Product Categories/Family for Lipid assay kit

Metabolism Research; Lipoprotein Metabolism; Lipid Quantification Kits; Lipid Quantification Kit (neutral lipids)

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/assay-kits/lipid/44630>