

Autophagy Assay Kit ab139484

★★★★★ [2 Abreviews](#) [53 References](#) [画像数 3](#)

製品の概要

製品名	Autophagy Assay Kit
検出方法	Fluorescent
サンプルの種類	Adherent cells, Suspension cells
アッセイタイプ	Cell-based
全工程の試験時間	0h 30m
製品の概要	<p>Autophagy Assay Kit ab139484 measures autophagic vacuoles and monitors autophagic flux in live cells using a dye that selectively labels autophagic vacuoles. It can be analyzed using flow cytometry, fluorescent microscopy, or using a microplate reader. The dye has spectral characteristics similar to FITC.</p> <p>The dye used in the autophagy assay protocol has been optimized by screening dyes for both minimal staining of lysosomes, and bright fluorescence upon incorporation into pre-autophagosomes, autophagosomes, and autolysosomes (autophagolysosomes). The dye is a cationic amphiphilic tracer (CAT) dye that rapidly partitions into cells in a similar manner to drugs that induce phospholipidosis.</p> <p>This autophagy assay offers a rapid and quantitative approach to monitoring autophagy in live cells without the need for cell transfection.</p> <p>Chloroquine is included in the kit for use as an inhibitor control. Rapamycin is included in the kit as an autophagy inducer for use as a positive control.</p> <p>Autophagy assay protocol summary:</p> <ul style="list-style-type: none">- remove growth medium from cells- add staining mix and incubate for 30 min- wash cells- analyze with fluorescence microscopy, flow cytometry, or fluorescent microplate reader
特記事項	<p>The reagents provided in this kit are sufficient for 200 flow cytometry tests, 250 fluorescence microscopy test or 3 x 96-well microplate tests.</p> <p>This product was previously called Autophagy Detection Kit.</p>
試験プラットフォーム	Microplate reader, Fluor. microscope, Flow cyt.

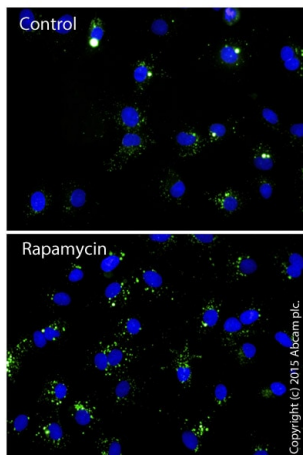
製品の特性

保存方法

Store at -80°C. Please refer to protocols.

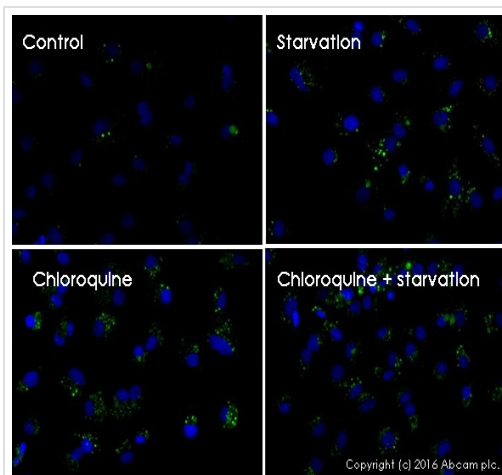
内容	1 kit
10X Assay Buffer	1 x 30ml
Autophagy Inducer	1 x 25nmole
Chloroquine	1 x 7.5µmole
Green Detection Reagent	1 x 50µl
Hoechst 33342 Nuclear Stain	1 x 50µl

画像



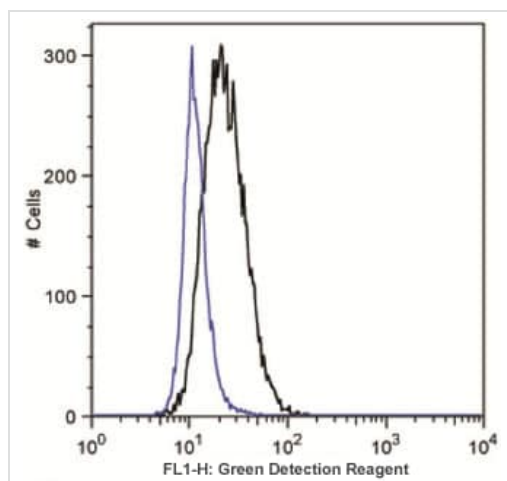
Fluorescent microscopy analysis showing nucleus (blue nuclear stain; DAPI filter) and autophagic vesicles (green, FITC filter) in control HepG2 cells or cells treated with 1 µM Rapamycin ([ab120224](#)) for 24 hours.

Functional Assay: ab139484 Autophagy Detection Kit



Fluorescent microscopy analysis showing nucleus (blue nuclear stain; DAPI filter) and autophagic vesicles (green, FITC filter) in control HepG2 cells or cells starved in serum free medium for 5 hours to induce the formation of autophagic vesicles. HepG2 cells were also treated with 0.1 mM chloroquine for 24 hours or starved and chloroquine treated for 5 hours (in earlier stages of autophagy, chloroquine induces autophagosome formation).

Functional Assay: ab139484 Autophagy Detection Kit



Jurkat cells (acute T-Cell leukemia), uninduced or treated overnight with 0.5 μ M Rapamycin (a typical autophagy inducer) were loaded with Green Detection Reagent, then washed and analyzed by flow cytometry. Results are presented as histogram overlay. Control cells (blue solid line) were stained as well but mostly display low fluorescence. In the samples treated with 500 nM Rapamycin for 18 hours (black solid line), Green dye signal increases about 2-fold, indicating that Rapamycin induced autophagy in Jurkat cells.

Flow cytometry-based profiling of ab139484

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