

Pyroptosis/Caspase-1 Assay Assay Kit

Pyroptosis/Caspase-1 Assay, Far Red

CATALOG # AAA52762	APPLICATIONS Flow Cytometry, Functional Assay
------------------------------	---

PRODUCT SYNONYMS

Pyroptosis/Caspase-1 Assay; Far Red; Far Red;Caspase-1; Pyroptosis/Caspase-1 Assay assay kit

PRODUCT SPECIFICATIONS

Sample	Cell culture
Reagent Name	660-YVAD-FMK
Excitation/Emission	660 nm / 690 nm
Applicable Applications for Pyroptosis/Caspase-1 Assay assay kit	FM (Fluorescence Microscopy), FCM/FACS (Flow Cytometry)
Preparation and Storage	Store at 2-8 degree C.

ADDITIONAL INFORMATION

Related Product Information for Pyroptosis/Caspase-1 Assay assay kit	Description: Pyroptosis/Caspase-1 Assay, Far Red utilizes our popular FLICA technology to measure caspase-1 activation. Using this kit, researchers can easily detect pyroptotic cells in their whole cell samples in vitro. This complete kit includes Nigericin for the simple and reliable generation of a positive control. Analyze the fluorescence signal using flow cytometry or fluorescence microscopy. Background: Inflammatory caspases, such as caspase-1, play a critical role in the mechanism to trigger the lytic programmed cell death known as pyroptosis. Pyroptosis/Caspase-1 Assay, Far Red can be used by researchers to assess caspase-1 activity in pyroptotic cells. This kit utilizes the far red, cell permeant FLICA reagent, 660-YVAD-FMK, for the in vitro detection of caspase-1 in whole living cells. 660-YVAD-FMK enters each cell and irreversibly binds to activated caspase-1. Because 660-YVAD-FMK becomes covalently coupled to the active enzyme, it is retained within the cell, while any unbound reagent diffuses out of the cell and is washed away. The remaining far red fluorescent signal is a direct measure of the active caspase-1 enzyme activity present in the cell at the time the reagent was added. Cells that contain the bound FLICA can be analyzed by a fluorescence microscope or flow cytometer. Cells labeled with the FLICA reagent may be read immediately, or preserved for up to 16 hours using Fixative (included in the kit). Unfixed samples may also be counter-stained with Hoechst 33342 (included in the kit) to label cell nuclei. This complete kit also includes Nigericin as a convenient option for generating a positive control. Nigericin induces a net decrease in intracellular levels of potassium, crucial for activation of caspase-1. In pyroptosis experiments, it has been shown to generate robust caspase-1 activation in a variety of cell types.
Product Categories/Family for Pyroptosis/Caspase-1 Assay assay kit	Cell Viability Assays; Caspases; Caspase-1

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.