

Caspase-1 Detection Kit | Casp1 detection kit

Pyroptosis 660 Caspase-1 Kit

CATALOG #
AAA50395

APPLICATIONS
Immunofluorescence, Flow Cytometry, Functional Assay

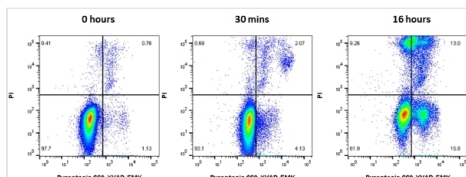
PRODUCT SYNONYMS

Caspase-1; Pyroptosis 660 Caspase-1 Kit; Pyroptosis 660 Caspase-1; Casp1 detection kit

PRODUCT SPECIFICATIONS

Form/Format	660 (Red Fluorescence)
Sequence Length	402
Applicable Applications for Casp1 detection kit	IF (Immunofluorescence), FCM/FACS (Flow Cytometry)
Preparation and Storage	MULTIPLE STORAGE CONDITIONS APPLY ON ARRIVAL. Store the unopened kit (and each unopened component) according to the storage instructions on each component label. Store the Nigericin at -20 degree C. Once reconstituted, the Nigericin stock should be used immediately or aliquoted and stored at -20 degree C for 12 months. Avoid repeated freezing and thawing.

IMAGES



Application Data

Detection of pyroptosis in Jurkat cells. Jurkat cells were stained with Pyroptosis 660 Caspase-1 Kit for two hours followed by treatment with 10 μM Nigericin as shown. Pyroptosis could be detected by an increase in active Caspase-1 detected by an increase in 660 far red fluorescence. Data analyzed on the ZE5 Cell Analyzer

ADDITIONAL INFORMATION

Related Product Information for Casp1 detection kit	Description: Pyroptosis 660 Caspase-1 Kit utilizes the popular FLICA technology to detect caspase-1 activation. This kits contain the caspase-1 inhibitor reagent YVAD-FMK, which has the preferred binding sequence for caspase-1, Tyr-Val-Ala-Asp (YVAD) (Chapman, 1992). This preferred caspase-1 binding sequence is labeled with 660 a far red fluorescent dye and linked to a fluoromethyl ketone (FMK) reactive entity. Caspase-1 will not cleave the FLICA inhibitor probe; instead, it forms an irreversible covalent bond with the FMK group on the reagent and becomes inhibited from further enzymatic activity. Test Principle: To use FLICA, add directly to the cell culture medium, incubate, and wash. FLICA is cell-permeant and will efficiently diffuse in and out of all cells. If there is an active caspase-1 enzyme inside the cell, it will covalently bind with YVAD-FMK and retain the fluorescent signal within the cell. Unbound FLICA will diffuse out of the cell during the subsequent wash steps. Therefore, positive cells will retain a higher concentration of FLICA and fluoresce brighter than negative cells. There is no interference from pro-caspases or inactive forms of the enzymes. After labeling with FLICA, cells can be counter-stained with other reagents and fixed or frozen. Cells labeled with YVAD-FMK can be counter-stained with reagents such as the red live/dead stains Propidium Iodide and 7-AAD. Nuclear morphology may be concurrently observed using Hoechst 33342 (included in the kit), a blue DNA-binding dye. Cells can be viewed through a fluorescence microscope or flow cytometer.
Product Categories/Family for Casp1 detection kit	Kits

NCBI AND UNIPROT INFORMATION

NCBI GI #	31542341
NCBI GeneID	25166
NCBI GenBank Nucleotide #	NP_036894.2
NCBI Official Full Name	caspase-1
NCBI Official Synonym Full Names	caspase 1
NCBI Official Symbol	Casp1
NCBI Official Synonym Symbols	Ice; I11bc
NCBI Protein Information	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.

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Online datasheet: <https://stage.aaabiotech.com/detection-kits/caspase-1/50395>