Datasheet: ICT9145

BATCH NUMBER 168294

Description:	PYROPTOSIS FAM CASPASE-1 KIT
Name:	PYROPTOSIS FAM CASPASE-1
Format:	FAM (Green Fluorescence)
Product Type:	Kits
Quantity:	25 - 50 TESTS

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Refer to Instructions for Use
Immunofluorescence	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
FAM	494	520

Product Information

Pyroptosis FAM Caspase-1 Kit utilizes the popular FLICA technology to detect caspase-1 activation. This kit 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 FAM a green fluorescent dye 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 Stain (included in the kit), a blue DNA-binding dye. Cells can be viewed through a fluorescence microscope or flow cytometer.
Reagents In The Kit	1 vial of FAM-YVAD-FMK Reagent - lyophilized 1 vial Nigericin - lyophilized 10X Wash Buffer, 15 ml Fixative, 6 mL Hoechst Stain, 1 ml.
Instructions For Use	Instructions for use can be found at https://www.bio-rad-antibodies.com/static/uploads/ifu/ict9145-6.pdf
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°C. Once reconstituted the Nigericin stock should be used immediately or aliquoted and stored at -20°C for 12 months. Avoid repeated freezing and thawing.
Guarantee	Guaranteed until date of expiry. Please see product label.
Acknowledgements	FLICA is a trademark of Immunochemistry Technologies, LLC.
Health And Safety Information	Material Safety Datasheet documentation #20279 #20431 #20435 #10498 #10476 available at: https://www.bio-rad-antibodies.com/SDS/ICT9145 FAM-YVAD-FMK Regaent (20279) Nigericin (20431) 10X Cellular Wash buffer (20435) Fixative (10498) Hoechst Stain (10476)
Regulatory	For research purposes only.

North & South America Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com

Worldwide Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com

Europe Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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