

## Datasheet: ICT9145

**BATCH NUMBER 160134**

<b>Description:</b>	PYROPTOSIS FAM CASPASE-1 KIT
<b>Name:</b>	PYROPTOSIS FAM CASPASE-1
<b>Format:</b>	FAM (Green Fluorescence)
<b>Product Type:</b>	Kits
<b>Quantity:</b>	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](http://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.

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**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

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**Instructions For Use** Instructions for use can be found at <https://www.bio-rad-antibodies.com/static/uploads/ifu/ict9145-6.pdf>

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**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.

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**Guarantee** Guaranteed until date of expiry. Please see product label.

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**Acknowledgements** FLICA™ is a trademark of Immunochemistry Technologies, LLC.

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**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 Reagent (20279)  
Nigericin (20431)  
10X Cellular Wash buffer (20435)  
Fixative (10498)  
Hoechst Stain (10476)

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**Regulatory** For research purposes only

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto: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](mailto: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](mailto:antibody_sales_de@bio-rad.com)

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