Datasheet: ICT098

BATCH NUMBER 156555

Description:	FAM FLICA™ CASPASE-1 KIT
Name:	CASPASE-1
Format:	FAM (Green Fluorescence)
Product Type:	Kits
Quantity:	100 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	▪			
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

The FAM FLICA Caspase-1 Kit uses a target sequence (YVAD) sandwiched between a green fluorescent label, carboxyfluorescein (FAM), and a fluoromethylketone (FMK) to make a quick and flexible method to analyze active caspases in apoptotic cells.

Test Principle

Caspase FLICA Kits measure apoptosis by detecting active caspases in whole, living cells. These kits do not work by using antibodies or as an ELISA. Instead, their methodology is based on a unique cell-permeable and non-cytotoxic reagent called the Fluorochrome Inhibitor of Caspases (FLICA). The FLICA reagent contains a caspase inhibitor sequence linked to a green (Carboxyfluorescein, FAM) fluorescent probe.

The Caspase FLICA Kits are suitable for cells in suspension and adherent cells from many species including mammalian, insect and yeast. Different cell types, e.g. HeLa, primary neurons, macrophages and lymphocytes have also been successfully studied with these kits.

	This kit can be used with a flow cytometer, fluorescence microscope or a fluorescence plate reader using black microtitre plates.
Reagents In The Kit	4 vials of FAM-YVAD-FMK FLICA Reagent - lyophilized 10x Apoptosis Wash Buffer, 60 mL Fixative, 6 mL Propidium Iodide, 1 mL Hoechst 33342, 1 mL
Instructions For Use	Instructions for use can be found at www.bio-rad-antibodies.com/uploads/IFU/ICT098.pdf
References	1. Hoegen, T. *et al.* (2011) The NLRP3 Inflammasome Contributes to Brain Injury in Pneumococcal Meningitis and Is Activated through ATP-Dependent Lysosomal Cathepsin B Release. J Immunol. 187: 5440-51. 2. Edwards, M.R. *et al.* (2015) Metabolic dysfunction in lymphocytes promotes postoperative morbidity. Clin Sci (Lond). Apr 20. [Epub ahead of print] 3. Inokuchi, T. *et al.* (2006) Plasma interleukin (IL)-18 (interferon-gamma-inducing factor) and other inflammatory cytokines in patients with gouty arthritis and monosodium urate monohydrate crystal-induced secretion of IL-18. Cytokine. 33 (1): 21-7. 4. Hussen, J. *et al.* (2012) Inflammasome activation in bovine monocytes by extracellular ATP does not require the purinergic receptor P2X7. Dev Comp Immunol. 38 (2): 312-20. 5. Wang, Y. *et al.* (2012) A comparative study of stress-mediated immunological functions with the adjuvanticity of alum. J Biol Chem. 287 (21): 17152-60. 6. Wang, Y. *et al.* (2015) Stress activated DC induce dual homeostatic and inflammasome pathways, which may elicit CD4+ memory T cells and IFN stimulated genes. J Biol Chem. pii: jbc.M115.645754. 7. Wree, A. *et al.* (2014) NLRP3 inflammasome activation results in hepatocyte pyroptosis, liver inflammation, and fibrosis in mice. Hepatology. 59 (3): 898-910. 8. Sharma, A.A. *et al.* (2015) Impaired NLRP3 inflammasome activity during fetal development regulates IL-1β production in human monocytes. Eur J Immunol. 45 (1): 238-49. 9. Gabrion, A. *et al.* (2016) mTOR inhibition counterbalances the inflammatory status of immune cells in Chronic Granulomatous Disease. J Allergy Clin Immunol. pii: S0091-6749(16)31057-0. [Epub ahead of print] 10. Burm, S.M. *et al.* (2015) Inflammasome-induced IL-1β secretion in microglia is characterized by delayed kinetics and is only partially dependent on inflammatory caspases. J Neurosci. 35 (2): 678-87.
Storage	Store the unopened kit and each unopened component at +4^{o}C until the expiration date. Once reconstituted with DMSO, use FLICA reagent immediately, or store at -20^{o}C for 6 months protected from light and thawed no more than twice during that time.
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 #10471 #10498 #10476 #10477 available at:

	https://www.bio-rad-antibodies.com/SDS/ICT098
Regulatory	For research purposes only

Product inquiries: www.bio-rad-antibodies.com/technical-support

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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