

Caspase-1 (active) Staining Kit - Green Fluorescence ab219935

5 References 2 图像

概述

产品名称	Caspase-1 (active) Staining试剂盒- Green Fluorescence
检测方法	Fluorescent
样品类型	Adherent cells, Suspension cells
检测类型	Cell-based
种属反应性	与反应: Mammals, Other species
产品概述	Caspase 1 (active) Staining Kit - Green Fluorescence (ab219935) is a sensitive fluorometric assay to measure caspase 1 activation in live cells. The assay uses FAM-YVAD-FMK, which binds irreversibly to active caspase 1 in stimulated cells. The fluorescent intensity of the FAM-YVAD-FMK signal is proportional to the amount of active caspase 1 and can be easily detected at Ex/Em = 490/525 nm by fluorescence microscopy, flow cytometer, or fluorescent microplate reader.
说明	Caspase activity assay kits are based on fluorescent inhibitors of caspases. These inhibitors are cell permeable and non-cytotoxic. Once inside the cell, the caspase inhibitors bind covalently to the active caspases. Caspase-1 is primarily involved in the activation of pro-inflammatory cytokines and the process of pyroptosis. It has been proven that caspase 1 has substrate selectivity for the peptide sequence Tyr-Val-Ala-Asp (YVAD).
平台	Microplate reader, Fluor. microscope, Flow cyt.

性能

存放说明 Store at -20°C. Please refer to protocols.

组件	25 tests
500X Hoechst Stain	1 x 100µl
500X Propidium Iodide	1 x 100µl
FAM-YVAD-FMK	1 vial
Washing Buffer	1 x 100ml

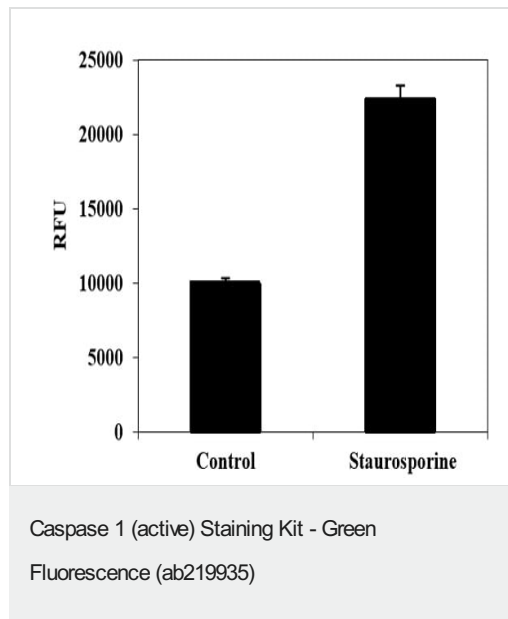
相关性 Caspases are a family of cysteine proteases that are key mediators of programmed cell death or

apoptosis. The precursor form of all caspases is composed of a prodomain, and large and small catalytic subunits. The active forms of caspases are generated by several stimuli including ligand-receptor interactions, growth factor deprivation and inhibitors of cellular functions. All known caspases require cleavage adjacent to aspartates to liberate one large and one small subunit, which associate into a2b2 tetramer to form the active enzyme. Caspase 1 is similar to the cell death gene CED3 of *C. elegans* and regulates multiple proinflammatory cytokines, including Interleukin 1b and interferon-gamma-inducing factor. Caspase 1 plays a role in down stream of Caspase 8 which is involved in Fas-mediated apoptosis.

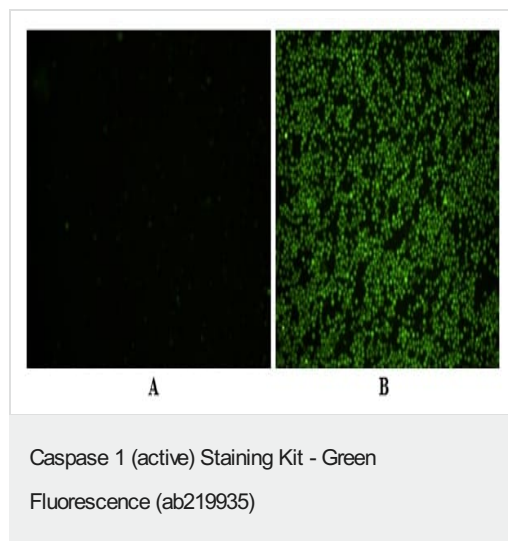
细胞定位

Cytoplasmic

图片



Detection of active Caspase 1 in Jurkat cells. Jurkat cells (3×10^5 cells/100 μ L/well) were either untreated (control) or treated with 1 μ M staurosporine for 3 hours. Cells were incubated with FAM-YVAD-FMK for 1 hour at 37°C. The fluorescent signal was measured at Ex/Em = 490/525 nm (cut off at 515 nm) with a FlexStation microplate reader (Molecular Devices) using bottom read mode.



Active caspase 1 staining in Jurkat cells. cells (3×10^5 cells/100 μ L/well) were either untreated (A) or treated with 1 μ M staurosporine for 3 hours (B). Cells were incubated with FAM-YVAD-FMK for 1 hour at 37°C. Increase in fluorescent intensity was observed using a fluorescence microscope with a FITC channel.

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