

## Product datasheet

# Cleaved Caspase-3 Staining Kit (FITC) ab65613

★★★★★ 1 Abreviews 11 References 2 图像

### 概述

<b>产品名称</b>	Caspase-3 (active) FITC 荧光 Staining 试剂盒
<b>样品类型</b>	Adherent cells, Suspension cells
<b>检测类型</b>	Enzyme activity
<b>检测时间</b>	2h 00m
<b>产品概述</b>	<p>Abcam's Caspase-3 (active) FITC Staining Kit provides a convenient means for sensitive detection of activated Caspase-3 in living cells. The assay utilizes the Caspase-3 inhibitor, DEVD-FMK, conjugated to FITC (FITC-DEVD-FMK) as a marker. FITC-DEVD-FMK is cell permeable, non-toxic, and irreversibly binds to activated Caspase-3 in apoptotic cells. The FITC label allows detection of activated caspase-3 in apoptotic cells directly by fluorescence microscopy, flow cytometry, or fluorescence plate reader.</p> <p>Visit our <a href="#">FAQs page</a> for tips and troubleshooting.</p>
<b>说明</b>	<p>Activation of caspases plays a central role in apoptosis.</p> <p><b>Other caspase and apoptosis assays</b></p> <p>Review the full set of <a href="#">caspase assays</a>, or the <a href="#">apoptosis assay and apoptosis marker guide</a>.</p>
<b>平台</b>	Microplate reader, Fluor. microscope, Flow cyt.

### 性能

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

组件	100 tests
FITC-DEVD-FMK	1 x 100µl
Wash Buffer	2 x 100ml
Z-VAD-FMK	1 x 10µl

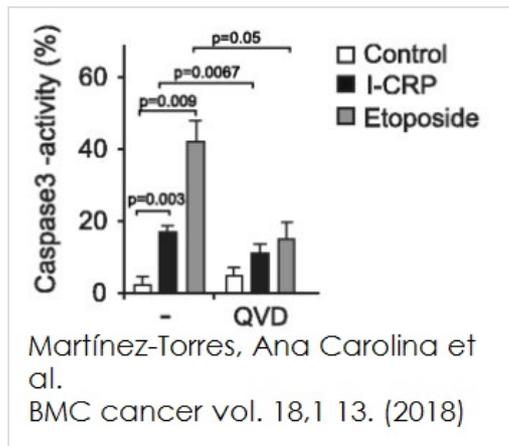
**相关性** The caspase family of cysteine proteases play a key role in apoptosis. Caspase 3 (also known as CPP32, YAMA and apopain) is the most extensively studied apoptotic protein among caspase family members. Caspase 3 is synthesized as an inactive pro enzyme that is processed in cells undergoing apoptosis by self proteolysis and/or cleavage by other upstream proteases (e.g. Caspases 8, 9 and 10). The processed form of Caspase 3 consists of large (17kD) and small (12kD) subunits which associate to form an active enzyme. Caspase 3 is cleaved at Asp28 -

Ser29 and Asp175 - Ser176. The active Caspase 3 proteolytically cleaves and activates other caspases (e.g. Caspases 6, 7 and 9), as well as relevant targets in the cells (e.g. PARP and DFF). Alternative splicing of this gene results in two transcript variants which encode the same protein. In immunohistochemical studies Caspase 3 expression has been shown to be widespread but not present in all cell types (e.g. commonly reported in epithelial cells of skin, renal proximal tubules and collecting ducts). Differences in the level of Caspase 3 have been reported in cells of short lived nature (eg germinal centre B cells) and those that are long lived (e.g. mantle zone B cells). Caspase 3 is the predominant caspase involved in the cleavage of amyloid beta 4A precursor protein, which is associated with neuronal death in Alzheimer's disease.

细胞定位

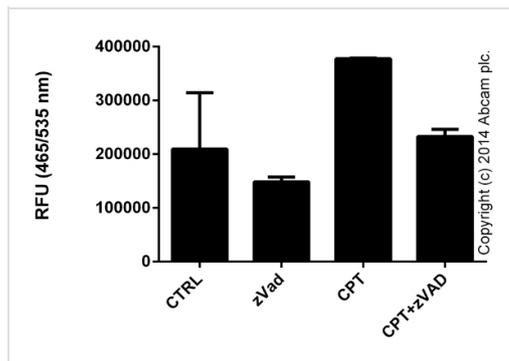
Cytoplasmic

图片



Caspase-3 activation was measured by flow cytometry, using ab65613, in cells that were left alone or pretreated with QVD.oph and then treated with I-CRP (1.25 U/ml) or etoposide (100 μM) for 24 h, data was then analyzed and graphed.

Functional Studies - Caspase-3 (active) FITC  
Staining Kit (ab65613)  
Martínez-Torres, Ana Carolina et al., BMC cancer?vol. 18,1 13., Fig 6, doi:10.1186/s12885-017-3954-5



Caspase-3 in Jurkat cells following 24 hour exposure to 2 μM Camptothecin (CPT; ab120115) with or without 20 nM caspase inhibitor Z-VAD(OMe)-FMK (zVAD; ab120487). Background signal subtracted, duplicates; +/- SD.

Functional assays: Caspase-3 (active) FITC Staining Kit (ab65613)

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