

Caspase-9 Inhibitor Assay Kit ab102497

4 图像

概述

产品名称	Caspase-9抑制剂Assay试剂盒
检测方法	Fluorescent
样品类型	Adherent cells, Suspension cells
检测类型	Quantitative
检测时间	1h 30m
产品概述	<p>Abcam's Caspase 9 Inhibitor Drug Detection Kit provides an effective means for screening caspase inhibitors using fluorometric methods. The assay utilizes synthetic peptide substrate LEHD-AFC (AFC, 7-amino-4-trifluoromethyl coumarin). Active caspase 9 cleaves the synthetic substrate to release free AFC which can then be quantified by fluorometry. Compounds to be screened can directly be added to the reaction and the level of inhibition of caspase 9 activity can be determined by comparison of the fluorescence intensity in samples with and without the testing inhibitors.</p> <p>Visit our <a href="#">FAQs page</a> for tips and troubleshooting.</p>
说明	<p>This product is manufactured by BioVision, an Abcam company and was previously called K159 Caspase-9 Inhibitor Drug Screening Kit (Fluorometric). K159-100 is the same size as the 100 test size of ab102497.</p> <p>Caspases have been shown to play a crucial role in apoptosis induced by various deleterious and physiologic stimuli. Inhibition of caspases can delay apoptosis, implicating a potential role in drug screening efforts.</p>
平台	Microplate reader

性能

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

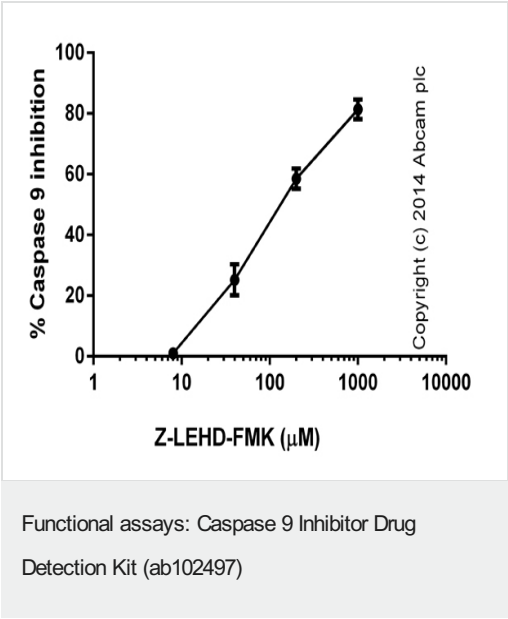
组件	100 tests
2X Reaction Buffer	1 x 10ml
Active Caspase-9	1 x 100 units
Caspase Inhibitor, Z-VAD-FMK (2 mM)	1 x 10µl

组件	100 tests
Caspase Substrate LEHD-AFC (1 mM)	1 x 0.5ml
DTT (1 M)	1 x 100µl

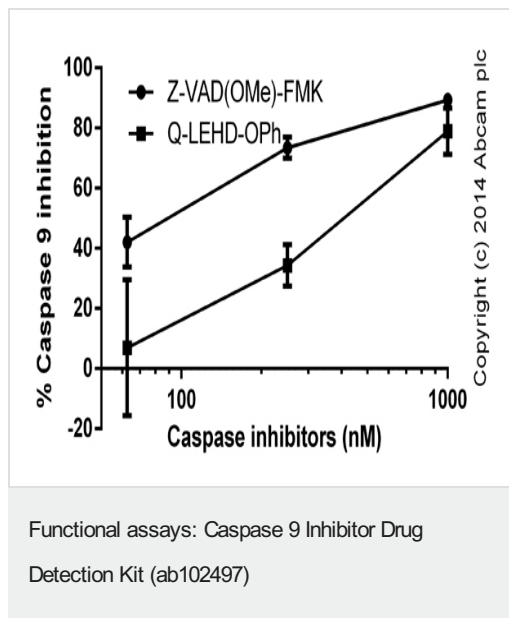
相关性

Caspases are cysteine proteases, expressed as inactive precursors, that mediate apoptosis by proteolysis of specific substrates. Caspases have the ability to cleave after aspartic acid residues. There are two classes of caspases involved in apoptosis; initiators (activation by receptor cluster) and effectors (activation by mitochondrial permeability transition). Proapoptotic signals autocatalytically activate initiator caspases, such as Caspase 8 and Caspase 9. Activated initiator caspases then process effector caspases, such as Caspase 3 and Caspase 7, which in turn cause cell collapse. Caspase 9 (also known as ICE like apoptotic protease 6 (ICE LAP6), apoptotic protease Mch6, and apoptotic protease activating factor 3 (Apaf3)) is a member of the peptidase family C14 that contains a CARD domain. It is active as a heterotetramer and has been reported to have two isoforms. ProCaspase 9 is approximately 47 kD. It is present in the cytosol and, upon activation, translocates to the mitochondria. Caspase 9 is involved in the caspase activation cascade responsible for apoptosis execution and cleaves/activates Caspase 3 and Caspase 6. It becomes activated when recruited to the Apaf1/cytochrome c complex.

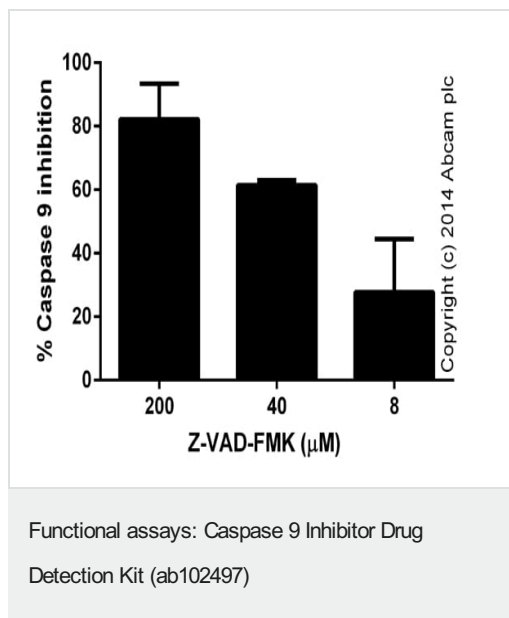
图片



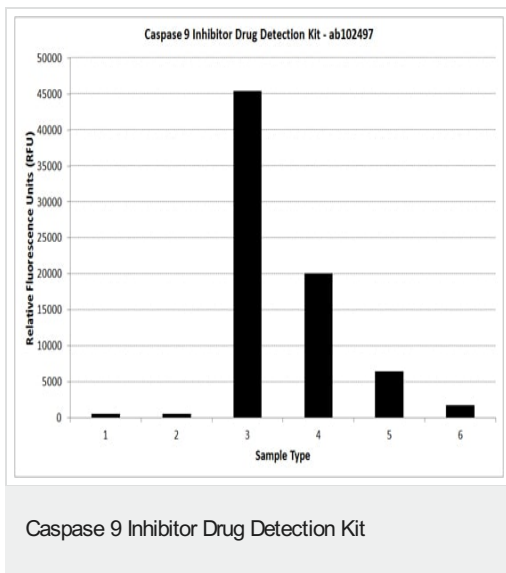
Titration of the caspase 9 inhibitor Z-LEHD-FMK ([ab142026](#)) (duplicates; +/- SD).



Titration of the caspase inhibitors Z-VAD(OMe)-FMK ([ab120487](#)) and Q-LEHD-Oph ([ab142039](#)) (duplicates; +/- SD).



Titration of caspase inhibitor Z-VAD-FMK (ab102497) (duplicates; +/- SD).



Caspase activity (RFU) in presence of 0 $\mu$ M - 40 $\mu$ M of z-VAD-FMK (generic caspase inhibitor), assessed using LEHD-AFC as caspase 9 substrate and following Caspase 9 Inhibitor Drug Detection Kit (**ab102493**) protocol. Lanes:

- 1.- Background Control: no Caspase 9, no z-VAD-FMK
- 2.- Positive Inhibition Control: no Caspase 9, +z-VAD-FMK
- 3.- Positive Control: + Caspase 9, no z-VAD-FMK
- 4.- Caspase 9 + 2.5 $\mu$ M z-VAD-FMK
- 5.- Caspase 9 + 10 $\mu$ M z-VAD-FMK
- 6.- Caspase 9 + 40 $\mu$ M z-VAD-FMK

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.cn/abpromise> or contact our technical team.

### Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors