# abcam

# Product datasheet

# Caspase-2 Inhibitor Assay Kit ab102490

### 1 Image

#### Overview

Product name Caspase-2 Inhibitor Assay Kit

**Detection method** Fluorescent

Sample type Adherent cells, Suspension cells

Assay type Quantitative
Assay time 1h 30m

Product overview Abcam's Caspase 2 Inhibitor Drug Detection Kit provides an effective means for screening

caspase inhibitors using fluorometric methods. The assay utilizes synthetic peptide substrate VDVAD-AFC (AFC, 7-amino-4-trifluoromethyl coumarin). Active caspase 2 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 2 activity can be determined by comparison of the fluorescence intensity in samples with and without the testing

inhibitors.

Visit our **FAQs page** for tips and troubleshooting.

Notes This product is manufactured by BioVision, an Abcam company and was previously called K152

Caspase-2 Inhibitor Drug Screening Kit (Fluorometric). K152-100 is the same size as the 100

test size of ab102490.

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.

**Platform** Microplate reader

#### **Properties**

**Storage instructions** Store at -20°C. Please refer to protocols.

| Components                   | 100 tests     |
|------------------------------|---------------|
| 2X Reaction Buffer           | 1 x 10ml      |
| Active Caspase-2             | 1 x 100 units |
| Caspase Inhibitor, Z-VAD-FMK | 1 x 10µl      |

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| Components                  | 100 tests |
|-----------------------------|-----------|
| Caspase Substrate VDVAD-AFC | 1 x 0.5ml |
| DΠ                          | 1 x 100µl |

| Function | Involved in the activation cascade of caspases | responsible for apoptosis execution. Might |
|----------|--|--|
|          |  |  |

function by either activating some proteins required for cell death or inactivating proteins

necessary for cell survival.

**Tissue specificity** Expressed at higher levels in the embryonic lung, liver and kidney than in the heart and brain. In

adults, higher level expression is seen in the placenta, lung, kidney, and pancreas than in the

heart, brain, liver and skeletal muscle.

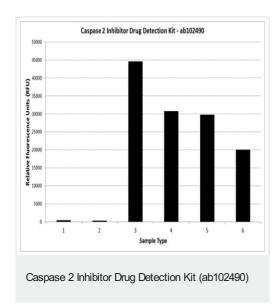
**Sequence similarities**Belongs to the peptidase C14A family.

Contains 1 CARD domain.

Post-translational modifications

The mature protease can process its own propeptide, but not that of other caspases.

#### **Images**



Caspase activity (RFU) in presence of  $0\mu M$  -  $40\mu M$  of z-VAD-FMK (generic caspase inhibitor), assessed using VDVAD-AFC as caspase 2 substrate and following Caspase 2 Inhibitor Drug Detection Kit (ab102490) protocol. Lanes:

- 1.- Background Control: no Caspase 2, no z-VMAD-FMK
- 2.- Positive Inhibition Control: no Caspase 2, +z-VAD-FMK
- 3.- Positive Control: + Caspase 2, no z-VAD-FMK
- 4.- Caspase 2 + 2.5µM z-VAD-FMK
- 5.- Caspase 2 + 10µM z-VAD-FMK
- 6.- Caspase 2 + 40µM z-VAD-FMK

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