



## Caspase-8 colorimetric assay Kit

### Product Information

#### Common Name

Caspase

**Cat.No.** Kit-0173

#### Product Overview

Based on the spectrophotometric detection of the chromophore pNA (p-nitroaniline) after cleavage from the labelled substrate IETD-pNA.

#### Description

The FLICE/Caspase-8 Colorimetric Assay Kit provides a simple and convenient means for assaying the activity of caspases that recognize the sequence IETD.

#### Storage

Store kit at  $-20^{\circ}\text{C}$  (Store Cell Lysis Buffer, 2X Reaction Buffer, and Dilution Buffer at  $4^{\circ}\text{C}$  after opening). All reagents are stable for at least 6 months.

#### Size

25 tests

#### Handling

Aliquot enough 2X Reaction Buffer for the number of assays to be performed. Add DTT to the 2X Reaction Buffer immediately before use (10 mM final concentration: add 10  $\mu\text{l}$  of 1.0 M DTT stock per 1 ml of 2X Reaction Buffer). •

After thawing, store Cell Lysis Buffer, 2X Reaction Buffer, and Dilution Buffer at  $4^{\circ}\text{C}$ . •

Protect IETD-pNA from light.

#### Kit Components

25ml Cell Lysis Buffer,  
2ml 2X Reaction Buffer,  
125 $\mu\text{l}$  IETD-pNA (4 mM),  
100 $\mu\text{l}$  DTT (1M),



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25ml Dilution Buffer.

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### Assay Protocol

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1. Induce apoptosis in cells by desired method. Concurrently incubate a control culture without induction.
  2. Count cells and pellet  $1-5 \times 10^6$  cells.
  3. Resuspend cells in 50  $\mu$ l of chilled Cell Lysis Buffer and incubate cells on ice for 10 minutes.
  4. Centrifuge for 1 min in a microcentrifuge (10,000 x g).
  5. Transfer supernatant (cytosolic extract) to a fresh tube and put on ice.
  6. Assay protein concentration (optional).
  7. Dilute 100-200  $\mu$ g protein to 50  $\mu$ l Cell Lysis Buffer for each assay.
  8. Add 50  $\mu$ l of 2X Reaction Buffer (containing 10 mM DTT) to each sample. Add 5  $\mu$ l of the 4 mM IETD-pNA substrate (200  $\mu$ M final conc.). Incubate at 37 ° C for 1-2 hour.
  9. Read samples at 400- or 405-nm in a microtiter plate reader, or spectrophotometer using a 100- $\mu$ l micro quartz cuvette , or dilute sample to 1 ml with Dilution Buffer and using regular cuvette (note: Dilution of the samples proportionally decreases the reading).
- You may also perform the entire assay in a 96-well plate. Fold-increase in FLICE activity can be determined by comparing the results of treated samples with the level of the uninduced control.
- Note: Background reading from cell lysates and buffers should be subtracted from the readings of both induced and the uninduced samples before calculating fold increase in FLICE activity.
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