

Caspase-12 Fluorometric Substrate, ATAD-AFC

CATALOG NO: 1117-200 200 assays (1 x 1 ml)
1117-1000 1000 assays (5 x 1 ml)

STORAGE: Store at -20° C, protected from light. Stable for 6 months

MOL. WEIGHT: 629.54

SEQUENCE: Ac-Ala-Thr-Ala-Asp-AFC
(AFC, 7-amino-4-trifluoromethyl coumarin)

PURITY: >90% by HPLC analysis

DESCRIPTION:

Ready-to-use fluorometric substrate for caspases that recognize the amino acid sequence ATAD. Caspase activity can be quantified by fluorescent detection of free AFC after cleaved from the peptide substrate ATAD-AFC at Ex/Em = 400/505 nm using a fluorometer or a fluorescence plate reader. Alternatively, a shift in fluorescence from blue to green upon cleavage can be visualized using a hand-held long-UV lamp. The ready-to-use caspase substrate provides an economic alternative for researchers who perform large amount of caspase assays. Cell Lysis Buffer (Cat.# 1067-100), 2X Reaction Buffer (Cat.# 1068-20), DTT (Cat.# 1201-1), and other reagents used for caspase activity assays are also available separately.

ASSAY PROTOCOL:

1. Induce apoptosis in cells by desired method. Concurrently incubate a control culture *without* induction.
 2. Count cells and pellet 1-5 x 10⁶ cells or use 50-200 µg cell lysates if protein concentration has been measured.
 3. Resuspend cells in 50 µl of chilled Cell Lysis Buffer (Cat.# 1067-100).
 4. Incubate cells on ice for 10 minutes.
 5. Add 50 µl of 2X Reaction Buffer (Cat.# 1068-20, -80) containing 10 mM DTT (Cat.# 1201-1) to each sample.
 6. Add 5 µl of the 1 mM ATAD-AFC (50 µM final conc.) into each tube individually and incubate at 37° C for 1-2 hour.
 7. Read samples in a fluorometer equipped with a 400-nm excitation filter and 505-nm emission filter. For a plate-reading set-up, transfer the samples to a 96-well plate. You may perform the entire assay directly in a 96-well plate.
- Fold-increase in ATAD-dependent caspase activity can be determined by comparing these results with the level of the uninduced control.

RELATED PRODUCTS:

Apoptosis Detection Kits & Reagents

- Annexin V Kits & Bulk Reagents
- Caspase Assay Kits & Reagents
- Mitochondrial Apoptosis Kits & Reagents
- Nuclear Apoptosis Kits & Reagents
- Apoptosis Inducers and Set
- Apoptosis siRNA Vectors

Cell Fractionation System

- Mitochondria/Cytosol Fractionation Kit
- Nuclear/Cytosol Fractionation Kit
- Membrane Protein Extraction Kit
- Cytosol/Particulate Rapid Separation Kit
- Mammalian Cell Extraction Kit
- FractionPREP Fractionation System

Cell Proliferation & Senescence

- Quick Cell Proliferation Assay Kit
- Senescence Detection Kit
- High Throughput Apoptosis/Cell Viability Assay Kits
- LDH-Cytotoxicity Assay Kit
- Bioluminescence Cytotoxicity Assay Kit
- Live/Dead Cell Staining Kit

Cell Damage & Repair

- HDAC Fluorometric & Colorimetric Assays & Drug Discovery Kits
- HAT Colorimetric Assay Kit & Reagents
- DNA Damage Quantification Kit
- Glutathione & Nitric Oxide Fluorometric & Colorimetric Assay Kits

Signal Transduction

- cAMP & cGMP Assay Kits
- Akt & JNK Activity Assay Kits
- Beta-Secretase Activity Assay Kit

Adipocyte & Lipid Transfer

- Recombinant Adiponectin, Survivin, & Leptin
- CETP Activity Assay & Drug Discovery Kits
- PLTP Activity Assay & Drug Discovery Kits
- Total Cholesterol Quantification Kit

Molecular Biology & Reporter Assays

- siRNA Vectors
- Cloning Insert Quick Screening Kit
- Mitochondrial & Genomic DNA Isolation Kits
- 5 Minutes DNA Ligation Kit
- 20 Minutes Gel Staining/Destaining Kit
- β -Galactosidase Staining Kit & Luciferase Reporter Assay Kit

Growth Factors and Cytokines

Monoclonal and Polyclonal Antibodies

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