



Caspase-12 Fluorometric Assay Kit

Product Information

Cat.No.

Kit-0158

Product Overview

Fluorometric assay kit for caspase-12 activity

Size

1 kit/100 assays

Description

Caspase family of proteases are the central mediators of apoptosis in mammalian cells. The Caspase-12 Fluorometric Assay Kit provides a simple and convenient means for assaying the activity of caspases that recognize the sequence ATAD. The assay is based on detection of cleavage of substrate ATAD-AFC (AFC: 7-amino-4-trifluoromethyl coumarin). ATAD-AFC emits blue light ($\lambda_{\text{max}} = 400 \text{ nm}$); upon cleavage of the substrate by caspase-12 or related caspases, free AFC emits a yellow-green fluorescence ($\lambda_{\text{max}} = 505 \text{ nm}$), which can be quantified using a fluorometer or a fluorescence microtiter plate reader.

Applications

Detect early/middle stages of apoptosis; differentiate apoptosis from necrosis.

Target Species

Mammal

Usage

For research use only. Not intended for any diagnostic or therapeutic purpose.

Storage

Store kit at -20°C (Store Cell Lysis Buffer & 2X Reaction Buffer at 4°C after opening). All reagents are Stable for 6 months from date of receipt under proper storage conditions.

Kit Components



Caspase-12 Fluorometric Assay Kit

Cell Lysis Buffer: 100ml; 2X Reaction Buffer: 4*2ml; ATAD-AFC (1mM): 0.5ml; DTT (1M): 0.4ml

Detection method Fluorescence microtiter plate reader (400-nm excitation filter and 505-nm emission filter) and fluorescence microscopy

Compatible Sample Types

Cell and tissue lysates

Features & Benefits

1. Simple one-step procedure; takes only 1-2 hours. 2. Fast and convenient. 3. Comparison of the fluorescence of AFC from an apoptotic sample with an uninduced control allows determination of the fold increase in caspase-12 activity.