

## Certificate of Analysis

### Caspase 3/7 Assay Kit (Ac-DEVD-AMC Substrate)

Catalog # 17-367  
Lot # DAM1400023

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### Kit Components

#### **2X Caspase Buffer**

Catalog # 20-274  
Lot # DAM1437181  
One vial containing **10.5ml** of 40mM PIPES, pH 7.2;  
150mM NaCl, 5mM EDTA, 0.2% CHAPS and 15%  
sucrose.

#### **Dithiothreitol**

Catalog # 20-273  
Lot # DAM1437180  
Two vials, each containing **15.4mg** of lyophilized  
dithiothreitol.

#### **White flat bottom 96-well plate**

Two 96 well white plates.

#### **Caspase Substrate**

Catalog # 12-541  
Lot # DAM1441053  
One vial containing **200µl** of a proprietary cocktail of  
Ac-DEVD-AMC substrate in DMSO. **Protect  
Caspase Substrate solution from light.**

#### **Caspase 3, active**

Catalog # 14-264  
Lot # 26083  
One vial containing **20µg** of recombinant full length  
protein in **200µl** phosphate buffered saline (PBS)  
containing 50% glycerol. The recombinant full length  
protein contains a C-terminal histidine tag; expressed  
in *E. coli*.

**FOR RESEARCH USE ONLY  
NOT RECOMMENDED OR INTENDED FOR DIAGNOSIS OF DISEASE IN HUMANS  
DO NOT USE IN HUMANS**

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### Kit Description

**Quantity:** Sufficient reagents for 192 assays per kit.

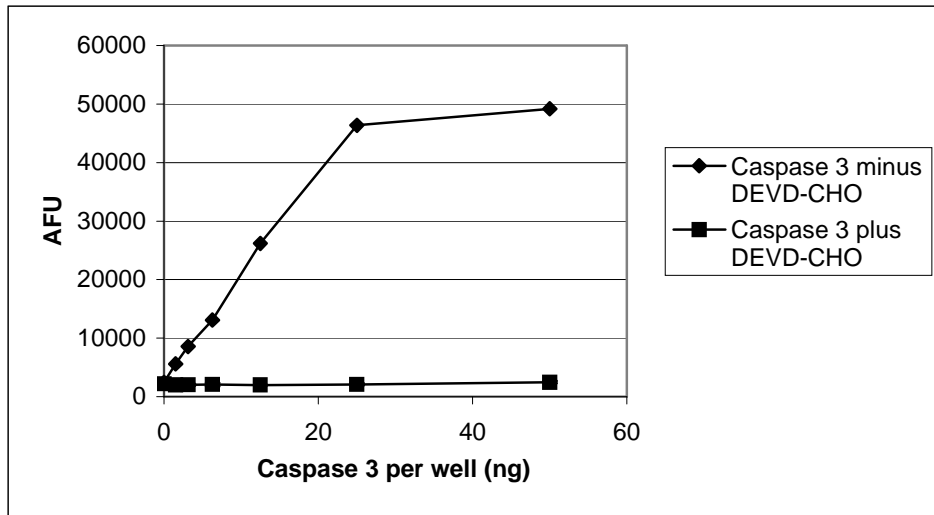
**Storage:** The 96 well plates should be stored at room temperature. All other components are stored at -20°C.

**Stability:** Components are stable for 6 months from date of shipment if stored and handled correctly.

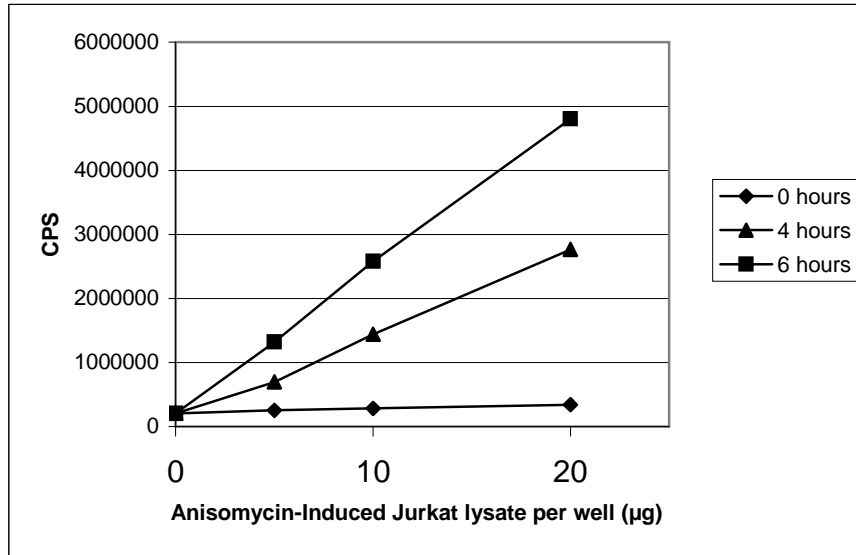
**Use:** This assay is a simple homogeneous assay performed in a microtiter plate. Caspase 3/7 activity is measured from the release of a fluorophore (AMC) from the substrate Ac-DEVD-AMC.

**Please refer to the User Manual for further information and a detailed assay procedure.**

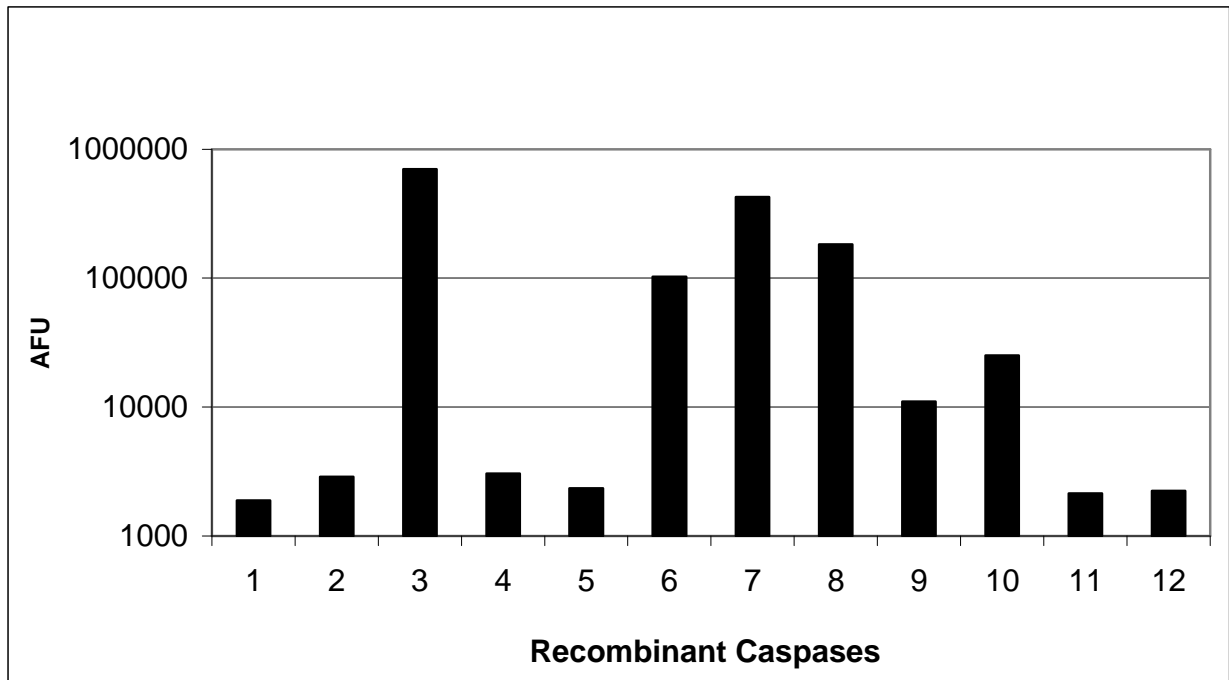
**Quality Control Testing**



**Figure 1. Ac-DEVD-CHO inhibition of Caspase 3 Activity.** Two fold serial dilutions of the Caspase 3, active were incubated with the caspase 3 substrate (Ac-DEVD-AMC) at 30°C in the presence and absence of 25µM caspase 3 inhibitor (Ac-DEVD-CHO). Fluorescence was measured after 30 minutes using a Wallac Victor<sup>2</sup> 1420, (PerkinElmer), Excitation = 380nm, Emission = 460nm. Arbitrary Fluorescent Units (AFU) are plotted. Points are means of triplicates.



**Figure 2. Detection of Caspase 3/7 activity in anisomycin-induced Jurkat cells using Ac-DEVD-AMC substrate.** Indicated concentrations of lysate prepared from Jurkat cells treated with 200µM anisomycin for 0, 4, or 6 hours were incubated at 37°C with Caspase Assay Substrate (Ac-DEVD-AMC). Fluorescence was measured after 30 minutes using an Analyst AD Multimode Reader (Molecular Devices), Excitation = 360nm, Emission = 460nm. Counts per second (CPS) are plotted. Points are means of duplicates.



**Figure 3. Activities of Caspases 1-12 Measured Using Ac-DEVD-AMC Substrate.** Two units each of recombinant caspases 1-12 were incubated (30°C) for 30 minutes. Fluorescence was measured using a Wallac Victor<sup>2</sup> 1420, (PerkinElmer), Excitation = 380nm, Emission = 460nm. Arbitrary Fluorescent Units (AFU) are plotted. Points are means of triplicates.

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