

Ac-DEVD-AMC *CAS 169332-61-0*

Catalog number: 13402 Unit size: 5 mg

| Component | Storage | Amount |
|-------------------------------|---|--------|
| Ac-DEVD-AMC *CAS 169332-61-0* | Freeze (<-15 °C), Minimize light exposure | 5 mg |

OVERVIEW

Ac-DEVD-AMC is a fluorogenic substrate for caspase 3, a protease that is rapidly activated when cells are exposed to apoptotic conditions and that cleaves poly(ADP-ribose) polymerase.

AT A GLANCE

Important notes

It is important to store at <-15 °C and should be stored in cool, dark place.

It can be used within 12 months from the date of receipt.

SAMPLE EXPERIMENTAL PROTOCOL

Following protocol only provides a guideline, and should be modified according to your specific needs.

General Solution Caspase Assays Using AMC, AFC, pNA, R110 and ProRed Substrates

- 1. Prepare a 10 mM stock solution in DMSO.
- 2. Prepare a 2X caspase substrate (50 μ M) assay solution as the following: 50 μ L substrate stock solution, 100 μ L DTT (1M), 400 μ L EDTA (100 mM), 10 mL Tris Buffer (20 mM), pH =7.4.
- 3. Mix equal volume of the caspase standards or samples with 2X caspase substrate assay solution, and incubate the solutions at room temperature for at least 1 hour.
- 4. Monitor the fluorescence using a fluorescence microplate reader, or absorbance using an absorbance microplate reader.

Cell Caspase Assays Using Cell-Permeable FMK Caspase Probes

- 1. Prepare a 2-5 mM stock solution in DMSO.
- 2. Treat cells as desired.
- 3. Prepare a 2X permeable caspase substrate (20 μ M) assay solution by diluting the DMSO stock solution (from Step 2.1) in Hanks with 20 mM Hepes buffer (HHBS).
- 4. Mix equal volume of the treated cells with 2X caspase substrate assay solution (from Step 2.3), and incubate the cells in a 37°C, 5% CO₂ incubator for at least1 hour.
- 5. Wash the cells with HHBS for at least once.
- 6. Monitor the fluorescence intensity by a flow cytometer, a fluorescence microscope or a fluorescence microplate reader.

Cell Caspase Assays Using Cell-Permeable FMK Caspase Probes (For #13470-13476 only)

- 1. Prepare a 250X stock solution by adding 50 µL DMSO into the vial.
- 2. Treat cells as desired.

- 3. Add 250 X DMSO stock solution into the cell solution at a 1:250 ratio (such as 2 μL to 500 μL cells), and incubate the cells in a 37°C, 5% CO2 incubator for 1 hour.
- 4. Wash the cells with HHBS for at least once.
- Monitor the fluorescence intensity by flow cytometer, fluorescence microscopy or fluorescent microplate reader.

EXAMPLE DATA ANALYSIS AND FIGURES



Figure 1. Chemical structure for Ac-DEVD-AMC *CAS 169332-61-0*

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