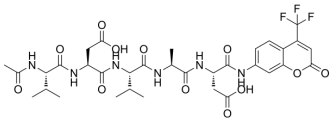
Ac-VDVAD-AFC

Cat. No.:	HY-P2615
CAS No.:	210344-94-8
Molecular Formula:	$C_{33}H_{41}F_3N_6O_{12}$
Molecular Weight:	770.71
Target:	Fluorescent Dye
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Ac-VDVAD-AFC is a caspase-specific fluorescent substrate. Ac-VDVAD-AFC can measure caspase-3-like activity and caspase-2 activity and can be used for the research of tumor and cancer[1].
In Vitro	Guidelines (Following is our recommended protocol. This protocol only provides a guideline, and should be modified according to your specific needs). Labeling of Cells[1]: 1. Culture cells in in a 6 well plate at a density of 3×10^5 cells per well or in a 96 well plate at a density of 3×10^4 cells per well. Incubate the cells according to your normal protocol. 2. 2 μM arsenic or cotreated with 2 μM arsenic and 25 μM quercetin to treate A549 cells for 24 h. 3. 50 μL of cell lysate is made up to 200 μL buffer containing HEPES 20 mM, 40 μM DEVD‐AMC, or Ac‐VDVAD‐AFC, and 2mM dithiothreitol. 4. 40 μM fluorescent substrate Ac-VDVAD-AFC is used to measure Caspase-2 activity for 4 days. 5. Fluorescence is measured at 460 and 505 nm wavelengths, respectively (The activity was calculated as arbitrary fluorescence units per min per mg protein). MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Pan Yang, et al. Quercetin attenuates the proliferation of arsenic-related lung cancer cells via a caspase-dependent DNA damage signaling. Mol Carcinog. 2022 Jul;61(7):655-663.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA