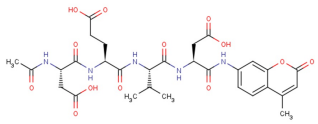
Data Sheet (Cat.No.T18909)

TargetMol
A DRUG SCREENING EXPERT

Ac-DEVD-AMC

Chemical Properties



CAS No.:	169332-61-0
Formula:	C30H37N5O13
Molecular Weight:	675.64
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	Ac-DEVD-AMC is the Caspase-3 substrate.
Targets(IC_{50})	Others: None
In vitro	Ac-DEVD-AMC can be used to monitor intracellular caspase-3 activity[1]. The AMC moiety is highest at 2 h (area =5.6±1.8), the AMC peak area for Ac-DEVD-AMC incubated without a lung specimen (substrate alone) for 6 h is relatively small [2].
Cell Research	Lung fragments (about 20 mg each) are collected from rats and mice. The samples are incubated at 37°C in 50 mL KH buffer or MEM (continuously gass with 95% O2: 5% CO2) for up to 6 h. At specific time points, samples are incubated in oxygenated KH buffer or MEM with 32 μM zVAD-fmk or 15 μL DMSO for 20 min (f/v=1.0 mL). Ac-DEVD-AMC (37 μM) is then added and the incubation continues for an additional 20 min. At the end of incubation, the tissue is disrupted by vigorous homogenization for 2 min, sonication for 3 min, and 10 passages through a 27-G needle. This disruption procedure quenches the Ac-DEVD-AMC cleavage reaction due to dilution. The supernatants are collected by centrifugation (~6,300g for 90 min) through a microcentrifuge filter, separated on HPLC, and analyzed for the fluorogenic AMC moiety [2].
Animal Research	

Solubility Information

Solubility	H2O: < 0.1 mg/mL (insoluble) (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.48 mL	7.4 mL	14.801 mL
5 mM	0.296 mL	1.48 mL	2.96 mL
10 mM	0.148 mL	0.74 mL	1.48 mL
50 mM	0.03 mL	0.148 mL	0.296 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. Ahmed R Alsuwaidi, et al. Bioenergetics of murine lungs infected with respiratory syncytial virus. Virol J. 2013; 10: 22.
2. Ahmed R Alsuwaidi, et al. Lung tissue bioenergetics and caspase activity in rodents. BMC Res Notes. 2013; 6: 12.

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