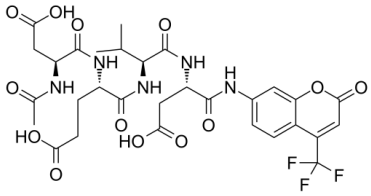
Data Sheet

Product Name:	Ac-DEVD-AFC
Cat. No.:	CS-7683
CAS No.:	201608-14-2
Molecular Formula:	C30H34F3N5O13
Molecular Weight:	729.61
Target:	Others
Pathway:	Others
Solubility:	DMSO : ≥ 50 mg/mL (68.53 mM); H2O : < 0.1 mg/mL (insoluble)



BIOLOGICAL ACTIVITY:

Ac-DEVD-AFC is a fluorogenic substrate (λ_{ex}=400 nm, λ_{em}=530 nm). **In Vitro:** After incubation with Ac-DEVD-AFC for 1 hour, significant increase of caspase-3 activity is observed at 4 hour compare with control. There are no significant increases of caspase-3 activity in Photofrin and LPLI group. The cleavage of Ac-DEVD-AFC in response to caspase-3 activation is remarkably inhibited by shRNA-BimL transfection[1].

PROTOCOL (Extracted from published papers and Only for reference)

Cell Assay: [1] For the detection of caspase-3 activity, PBS washes cell pellets (derive from either the medium or the adherent cells) which are suspended in extract buffer [25 mM HEPES (pH7.4), 0.1% TritonX-l00, 10% glycerol, 5 mM DTT, 1mM phenylmethylsulfonyl fluoride, 10 mg/mL pepstatin, and 10 mg/mL Leupeptin] and vortexed vigorously. 20μl of extract (corresponding to 10% of the sample) are incubated with the caspase-3 fluorogenic substrates Ac-DEVD-AFC at 100 μM final concentration at room temperature, and caspase-3 activity is measured continuously by monitoring the release of fluorigenic AFC at 37°C[1].

References:

[1]. Wang X, et al. Involvement of Bim in Photofrin-mediated photodynamically induced apoptosis. Cell Physiol Biochem. 2015;35(4):1527-36.

CAIndexNames:

L-α-Asparagine, N-acetyl-L-α-aspartyl-L-α-glutamyl-L-valyl-N-[2-oxo-4-(trifluoromethyl)-2H-1-benzopyran-7-yl]-

SMILES:

FC(F)(C(C1=CC=C(NC([C@H](CC(O)=O)NC([C@H](C(C)C)NC([C@H](CCC(O)=O)NC([C@@H](NC(C)=O)CC(O)=O)=O)=O)=O)=O)C=C1O2)=CC2=O)F

Tel: 732-484-9848 Fax: 888-484-5008 E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA