### abcam

### Product datasheet

# Z-VAD(OMe)-FMK, Cell permeable, irreversible pan-caspase inhibitor ab120487

20 References 画像数 4

製品の概要

製品名 Z-VAD(OMe)-FMK, Cell permeable, irreversible pan-caspase inhibitor

製品の詳細 Cell permeable, irreversible pan-caspase inhibitor

生理活性の詳細 A cell-permeable, irreversible, pan-caspase inhibitor. Inhibits caspase processing and apoptosis

induction in tumor cells *in vitro*. Once in the cell, endogenous esterase activity hydrolyzes the methyl groups to form the biologically active form. Therefore, when using with isolated, purified or

recombinant caspase enzymes, pre-treatment with an esterase is required.

**CAS 番号** 187389-52-2

**構造式** Z-Val-Ala-Asp(OMe)-FMK

製品の特性

分子量 467.49

分子式  $C_{22}H_{30}FN_3O_7$ 

配列 VAD (Modifications: N-terminal benzyloxycarbonyl; C-terminal FMK; Asp-3 = Asp(OMe))

**PubChem 登録番号** 5497173

保存方法 Store at -20°C. Store under desiccating conditions. The product can be stored for up to 12

months.

溶解性 Soluble in DMSO to 20 mM

使用に関する注意 Wherever possible, you should prepare and use solutions on the same day. However, if you need

to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20 $^{\circ}$ C. Generally, these will be useable for up to one week. Before use, and

prior to opening the vial we recommend that you allow your product to equilibrate to room

temperature for at least 1 hour.

Need more advice on solubility, usage and handling? Please visit our **frequently asked** 

questions (FAQ) page for more details.

SMILES 線形表記 FCC(=O)C(CC(=O)OC)NC(=O)[C@H](C)NC(=O)[C@@H](NC(=O)OCc1ccccc1)C(C)C

由来 Synthetic

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab120487の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

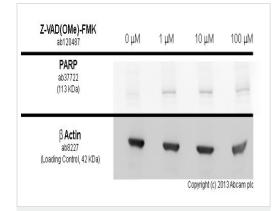
アプリケーション	Abreviews	特記事項
Functional Studies		Use at an assay dependent concentration.

#### 画像

# Z-Val-Ala-Asp(OMe)-FMK

Chemical Structure - Z-VAD(OMe)-FMK, Cell permeable, irreversible pan-caspase inhibitor (ab120487)

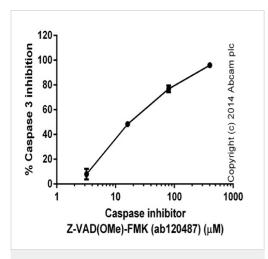
2D chemical structure image of ab120487, Z-VAD(OMe)-FMK, Cell permeable, irreversible pan-caspase inhibitor



Functional Studies - Z-VAD(OMe)-FMK, Cell permeable, irreversible pan-caspase inhibitor (ab120487)

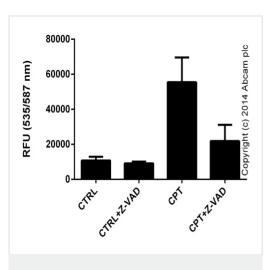
HeLa cells were incubated at 37°C for 1h with vehicle control (0  $\mu$ M) and different concentrations of Z-VAD(OMe)-FMK (ab120487). After this incubation 10  $\mu$ M of camptothecin (ab120115) was added to all samples and the cells were incubated for further 24h. Increased expression of full length PARP (ab37722) in camptothecin induced apoptotic HeLA cells correlates with an increase in Z-VAD(OMe)-FMK concentration, as described in literature.

Whole cell lysates were prepared with RIPA buffer (containing protease inhibitors and sodium orthovanadate), 10  $\mu$ g of each were loaded on the gel and the WB was run under reducing conditions. After transfer the membrane was blocked for an hour using 5% BSA before being incubated with **ab37722** at 1  $\mu$ g /ml and **ab8227** at 1  $\mu$ g /ml overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP (**ab97051**) at 1/10000 dilution.



Titration of the Caspase inhibitor Z-VAD(OMe)-FMK (ab120487) (duplicates; +/- SD).

Functional Studies - Z-VAD(OMe)-FMK, Cell permeable, irreversible pan-caspase inhibitor (ab120487)



Functional Studies - Z-VAD(OMe)-FMK, Cell permeable, irreversible pan-caspase inhibitor (ab120487)

## Functional assays: Caspase 3 (active) Red Staining Kit (ab65617)

Caspase 3 activity in Jurkat cells (3 x10e5 cells) following 24 hour exposure to 2  $\mu$ M Camptothecin (ab120115) with or without 50  $\mu$ M caspase inhibitor Z-VAD(OMe)-FMK (ab120487). Background signal subtracted, duplicates; +/- SD.

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