

Product Data Sheet

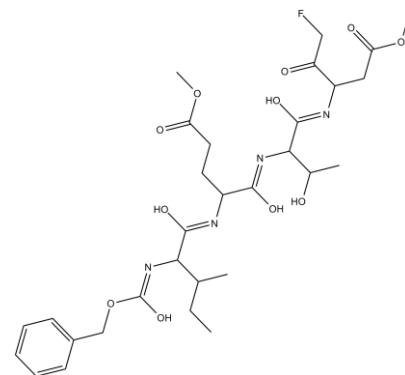
Chemical Properties

Product Name: Caspase-8 Inhibitor
Z-IETD-FMK

Cas No.: N/A

M.Wt: 654.68

Formula: C₃₀H₄₃FN₄O₁₁



Chemical Name: (Z)-2-((Z)-2-((E)-((benzyloxy)(hydroxy)methylene)amino)-1-hydroxy-3-methylpentylidene)amino)-N-((Z)-1-((5-fluoro-1-methoxy-1,4-dioxopentan-3-yl)imino)-1,3-dihydroxybutan-2-yl)-5-methoxy-5-oxopentanimidic acid

Canonical SMILES: CCC(C(/N=C(OCC1=CC=CC=C1)\O)/C(O)=N/C(/C(O)=N/C(/C(O)=N/C(C(F)=O)CC(OC)=O)C(O)C)CCC(OC)=O)C

Solubility: Soluble in DMSO

Storage: Store at -20°C

General tips: For obtaining a higher solubility, please warm the tube at 37° C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20° C for several months.

Shopping Condition: Evaluation sample solution : ship with blue ice
All other available size: ship with RT, or blue ice upon request

Biological Activity

Targets : Caspase Kit

Pathways: Apoptosis Kit >> Caspase Kit

Description:

Z-IETD-FMK is an inhibitor of caspase 8 [1].

Z-IETD-FMK inhibits T cell proliferation induced by PHA or anti-CD3 plus anti-CD28 without

toxicity of resting T cells. The mechanism of this inhibition of Z-IETD-FMK has been proved not through the effect on IL-2 secretion or IFN- γ production but the decrease of CD25 expression. Experiments show that Z-IETD-FMK has no effect on normal cell growth when there is no activation signal. Z-IETD-FMK has also been found to significantly inhibit NF- κ B activation when the concentration is 100 μ M [1].

Apart from the ability of inhibiting cell proliferation, Z-IETD-FMK is reported to inhibit TRAIL-mediated killing in cells. It protects the procaspases 9, 2, and 3, and protects PARP to a similar extent in both HCT116 and SW480 cells [2].

Reference:

[1] C.P. Lawrence, S.C. Chow. *Suppression of human T cell proliferation by the caspase inhibitors, z-VAD-FMK and z-IETD-FMK is independent of their caspase inhibition properties. Toxicology and Applied Pharmacology. 2012, 265: 103-112.*

[2] Nesrin Özören, Kunhong Kim, Timothy F. Burns, et al. *The caspase 9 inhibitor Z-LEHD-FMK protects human liver cells while permitting death of cancer cells exposed to tumor necrosis factor-related apoptosis-inducing ligand. Cancer Research. 2000, 60: 6259-6265.*

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most ApexBio products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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