Datasheet

Product overview

Name: Z-VAD-FMK
Cat No: HB1285
Short description: Broad spectrum caspase inhibitor
Biological description: Broad spectrum caspase inhibitor. Blocks apoptosis and activation of caspases during Fas-L induced apoptosis. Also inhibits T-cell proliferation displaying immunosuppressive properties.
Alternative names: ZVAD-FMK; Z-VAD.FMK
Biological action: Inhibitor

Properties

Chemical name: Benzyloxy carbonyl-Val-Ala-Asp(OMe)-fluoromethylketone
Molecular Weight: 467.49
Chemical structure: Z-Val-Ala-Asp(OMe)-FMK
Molecular Formula: C_{22}H_{30}FN_{3}O_{7}
CAS Number: 187389-52-2
PubChem identifier: 5497174
SMILES: C[C@@H](C(=O)N[C@@H](CC(=O)OC)C(=O)CF)NC(=O)[C@H](C(C)C)NC(=O)OCC1=CC=CC=C1
InChi: InChI=1S/C22H30FN3O7/c1-13(2)19(26-22(31)33-12-15-8-6-5-7-9-15)21(30)24-14(3)20(29)25-16(17(27)11-23)10-18(28)32-4/h5-9,13-14,16,19H,10-12H2,1-4H3,(H,24,30)(H,25,29)(H,26,31)/t14-,16-,19-/m0/s1
InChiKey: MIFGOLAMNLGLQG-QOKNOXGSA-N
MDL number: MFCD01074990

Storing and Using Your Product

Storage instructions: -20°C
Solubility overview: Soluble in DMSO (20 mM)
Important: This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

References for Z-VAD-FMK

Radiation-induced cytochrome c release and the neuroprotective effects of the pan-caspase inhibitor z-VAD-fmk in the hypoglossal nucleus.

PubMedID: 24396410
Suppression of human T cell proliferation by the caspase inhibitors, z-VAD-FMK and z-IETD-FMK is independent of their caspase inhibition properties.


PubMedID: 22982538

Inhibition of human caspases by peptide-based and macromolecular inhibitors.


PubMedID: 9829999

Correlation of tumor necrosis factor alpha (TNF alpha) with high Caspase 3-like activity in myelodysplastic syndromes.


PubMedID: 10403560