**PRODUCT INFORMATION**

**Q-VD-OPH**  
**Item No. 15260**

**CAS Registry No.:** 1135695-98-5  
**Formal Name:** (3S)-5-(2,6-difluorophenoxy)-3-[(2S)-3-methyl-1-oxo-2-[2-quinolinylcarbonyl]amino]butyl]amino]-4-oxo-pentanoic acid  
**Synonym:** Quinoline-Val-Asp-Difluorophenoxymethylketone  
**MF:** C_{26}H_{25}F_{2}N_{3}O_{6}  
**FW:** 513.5  
**Purity:** ≥95%  
**Supplied as:** A white solid  
**Storage:** -20°C  
**Stability:** As supplied, 3 years from the QC date provided on the Certificate of Analysis, when stored properly

### Laboratory Procedures

Q-VD-OPH is supplied as a white solid. A stock solution may be made by dissolving the Q-VD-OPH in the solvent of choice. Q-VD-OPH is soluble in DMSO.

### Description

Q-VD-OPH is a broad spectrum caspase inhibitor, blocking caspases-3, -7, -8, -9, -10, and -12 and inhibiting apoptosis when used at 10 µM.\(^1,2\) It more effectively inhibits apoptosis and is much less cytotoxic than Z-VAD-FMK and BOC-D-FMK.\(^1,2\) Q-VD-OPH can be used in vivo, where it has been shown to prevent ischemia-reperfusion injury-induced apoptosis.\(^3,4\) This compound, by broadly inhibiting caspases, also promotes the differentiation of leukemic blasts cells, suggesting an application in differentiation therapy of certain forms of cancer.\(^5\)

### References