

Catalog # 10-2940 Q-VD-OPh

CAS# 1135695-98-5
Quinolyl-valvl-aspartyl-[2,6-difluorophenoxy]methyl ketone
Lot # X106499

Q-VD-OPh is a potent and highly effective pan-caspase inhibitor with potent antiapoptotic activity which is not toxic to cells. Displays protective effects on brain damage and bacterial infection in a murine MCAO stroke model. Switches doxorubicin-induced apoptosis to an alternative default cell death mode marked by increased expression of senescence markers. Blocks staurosporin-induced differentiation of embryonic stem cells to cardiomyocytes. Trophoblasts treated with ceramide and Q-VD-OPh undergo necroptosis.

- 1) Caserta et al. (2003), Q-VD-OPh, a broad spectrum caspase inhibitor with potent antapoptotic properties; Apoptosis, 8 345
- 2) Braun et al. (2007), Protection from brain damage and bacterial infection in murine stroke by the novel caspase-inhibitor Q-VD-OPH; Exp. Neurol., **206** 183
- 3) Rebbaa et al. (2003), Caspase inhibition switches doxorubicin-induced apoptosis to senescence; Oncogene, 22 2805
- 4) Bulatovic et al. (2015), Sublethal caspase activation promotes generation of cardiomyocytes from embryonic stem cells; PLoS One. 10 e0120176
- 5) Bailey et al. (2017), Augmented trophoblast cell death in preeclampsia can proceed via ceramide-mediated necroptosis; Cell Death Dis., **8** e2590

PHYSICAL DATA

Molecular Weight: 513.49

Solubility:

Molecular Formula: $C_{26}H_{25}F_2N_3O_6$ Purity: 99% by HPLC NMR: (Conforms)

Soluble in DMSO (up to 15 mg/ml)

Physical Description: White solid

Storage and Stability: Store as supplied desiccated at -20°C for up to 1 year from the date of purchase.

Solutions in DMSO may be stored at -20°C for up to 1 month.

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