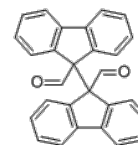


Product Name : Raptinal
Cat. No. : PC-21768
CAS No. : 1176-09-6
Molecular Formula : C₂₈H₁₈O₂
Molecular Weight : 386.45
Target : Apoptosis Inducer
Solubility : 10 mM in DMSO



Biological Activity

Raptinal is a small molecule rapid apoptosis inducer, initiates intrinsic pathway caspase-dependent apoptosis in multiple cell lines, also inhibits the activity of caspase-activated Pannexin 1 (PANX1).

Raptinal rapidly trigger apoptosis by promoting the release of cytochrome c from the mitochondria and subsequently activating the intrinsic apoptotic pathway.

Raptinal is very effective at inducing apoptosis in a variety of different cell types in vitro and in vivo.

Raptinal inhibits cleavage-activated PANX1 via a mechanism distinct to other well-described PANX1 inhibitors such as carbenoxolone and trovafloxacin.

Raptinal also interferes with PANX1-regulated apoptotic processes including the release of the 'find-me' signal ATP, the formation of apoptotic cell-derived extracellular vesicles, as well as NLRP3 inflammasome activation.

Raptinal is the first compound that can simultaneously induce apoptosis and inhibit PANX1 channels.

References

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Heimer S, et al. Cell Death Dis. 2019 Jul 19;10(8):556.

Santavanond JP, et al. Cell Death Dis. 2024 Feb 9;15(2):123.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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