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## Product Data Sheet

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Product Name: QM31  
Cat. No.: GC65474

### Chemical Properties

Cas. No. 937735-00-7

Formula C<sub>39</sub>H<sub>38</sub>Cl<sub>4</sub>N<sub>4</sub>O<sub>4</sub> M.Wt 768.56

Solubility 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.

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

Structure

### Background

QM31 (SVT016426), a cytoprotective agent, is a selective inhibitor of Apaf-1. QM31 inhibits the formation of the apoptosome (IC<sub>50</sub>=7.9μM), the caspase activation complex composed by Apaf-1, cytochrome c, dATP and caspase-9. QM31 exerts mitochondrioprotective functions and interferes with the intra-S-phase DNA damage checkpoint[1][2].

SVT016426 (0.5-2 μM) inhibits Apaf1-induced activation of caspase activity with an IC<sub>50</sub> of 5 μM in HeLa S100 cells[3].

[1]. Mondragón L, et al. A chemical inhibitor of Apaf-1 exerts mitochondrioprotective functions and interferes with the intra-S-phase DNA damage checkpoint. *Apoptosis*. 2009 Feb;14(2):182-90.

[2]. Orzáez M, et al. Apaf-1 inhibitors protect from unwanted cell death in in vivo models of kidney ischemia and chemotherapy induced ototoxicity. *PLoS One*. 2014 Oct 20;9(10):e110979.

[3]. Gortat A, et al. Apaf1 inhibition promotes cell recovery from apoptosis. *Protein Cell*. 2015 Nov;6(11):833-43.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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