Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

(20S) -Protopanaxadiol

Catalog No: tcsc2998

Available Sizes

Size: 10mg

Size: 50mg

Specifications

CAS No:
30636-90-9

Formula:
$C_{30}H_{52}O_3$

Pathway:
Membrane Transporter/Ion Channel

Target:
P-glycoprotein

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Alternative Names:
20-Epiprotopanaxadiol;20(S)-APPD

Observed Molecular Weight:
460.73

Product Description

(20S)-Protopanaxadiol (20-Epiprotopanaxadiol) is an aglycon metabolic derivative of the protopanaxadiol-type ginseng saponin; apoptosis inducer.

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IC50 value:

Target: apoptosis inducer

(20S)-Protopanaxadiol was used to induce cytotoxicity for two human glioma cell lines, SF188 and U87MG. For the SF188 cells, (20S)-Protopanaxadiol activated caspases-3, -8, -7, and -9 within 3 h and induced rapid apoptosis, which could be partially inhibited by a general caspase blocker and completely abolished when the caspase blocker was used in combination with an antioxidant. (20S)-Protopanaxadiol also induced cell death in U87MG cells but did not activate any caspases in these cells [1]. aPPD was able to inhibit P-gp activity as potently as verapamil on MDR cells. The blockage of P-gp activity was highly reversible as wash-out of aPPD resulted in an immediate recovery of P-gp activity. Unlike verapamil, aPPD did not affect ATPase activity of P-gp suggesting a different mechanism of action [2].