

# Ginsenoside Rh2

Catalog No: tcsc3835



## Available Sizes

**Size:** 5mg

**Size:** 10mg



## Specifications

**CAS No:**

78214-33-2

**Formula:**

$C_{36}H_{62}O_8$

**Pathway:**

Apoptosis;Apoptosis

**Target:**

Apoptosis;Caspase

**Purity / Grade:**

>98%

**Solubility:**

DMSO :  $\geq 300$  mg/mL (481.64 mM)

**Alternative Names:**

20(S)-Ginsenoside Rh2;20(S)-Rh2;Ginsenoside-Rh2

**Observed Molecular Weight:**

622.87

## Product Description

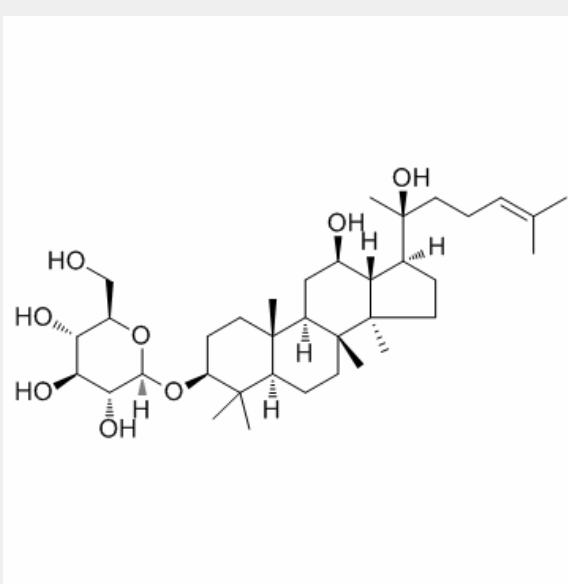
Ginsenoside Rh2 is isolated from the root of *Ginseng*. Ginsenoside Rh2 induces the activation of **caspase-8** and **caspase-9**. Ginsenoside Rh2 induces cancer cell **apoptosis** in a multi-path manner.

IC50 & Target: Caspase-8 and Caspase-9<sup>[1]</sup>

Apoptosis<sup>[1]</sup>

***In Vitro:*** Ginsenoside Rh2 induces the activation of two initiator caspases, caspase-8 and caspase-9 in human cancer cells. Ginsenoside Rh2 induces cancer cell apoptosis in a multi-path manner and is therefore a promising candidate for anti-tumor drug development. Ginsenoside Rh2 triggers p53-dependent Fas expression and consequent activation of caspase-8 and p53-independent caspase-9-mediated intrinsic pathway to cause cancer cell death. The cytotoxic activity of Ginsenoside Rh2 in the human tumor cell lines HeLa, SK-HEP-1, SW480, and PC-3 is assessed by MTT. The cell viability of HeLa cells is remarkably inhibited by Ginsenoside Rh2, with an IC<sub>50</sub> value of 2.52 µg/mL, whereas SK-HEP-1 and SW480 cells are less sensitive to Ginsenoside Rh2, with IC<sub>50</sub> values of 3.15 µg/mL and 4.06 µg/mL, respectively. PC-3 cells are the least vulnerable to Ginsenoside Rh2, with an IC<sub>50</sub> value of 7.85 µg/mL, 3-fold higher than HeLa cells<sup>[1]</sup>.

***In Vivo:*** A total of 15 days following B16-F10 cell injection, tumor sizes from the 3 tumor bearing groups are measured. The tumor sizes in the G-L group and G-H group (G-L and G-H refer to a low or high dose of ginsenoside Rh2 injection) are reduced compared with the tumor group (P[2]).



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!