



# **Ginsenoside Rh1**

**Catalog No: tcsc3834** 

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#### **Available Sizes**

Size: 5mg

Size: 10mg



## **Specifications**

CAS No:

63223-86-9

#### Formula:

 $C_{36}H_{62}O_{9}$ 

#### **Pathway:**

Immunology/Inflammation;Cell Cycle/DNA Damage;Apoptosis

### **Target:**

Interleukin Related; PPAR; TNF Receptor

### **Purity / Grade:**

>98%

### **Solubility:**

10 mM in DMSO

#### **Alternative Names:**

Prosapogenin A2; Sanchinoside B2; Sanchinoside Rh1

### **Observed Molecular Weight:**

638.87

# **Product Description**

Ginsenoside Rh1 is isolated from the root of *Panax Ginseng*. Ginsenoside Rh1 inhibits the expression of **PPAR-\gamma**, **TNF-\alpha**, **IL-6**, and **IL-1** $\beta$ .



IC50 & Target: PPAR- $\gamma$ , TNF- $\alpha$ , IL-6, and IL-1 $\beta$ <sup>[1]</sup>

In Vitro: The effect of Ginsenoside Rh1 is examined on adipogenesis in 3T3-L1 cells. Ginsenoside Rh1 potently inhibits the adipogenesis, as assessed by Oil-red O staining and lipid contents in 3T3-L1 adipocytes. Ginsenoside Rh1, at concentrations of 50 μM and 100 μM, inhibit the adipogenesis by 50% and 63%, respectively. The expression levels of adipocytespecific genes such as PPAR-γ, C/EBP-α, FAS, aFABP and some genes are examined during early phase of differentiation such as Pref-1, C/EBP-δ and Glucocorticoid receptor (GR). After the treatment with Ginsenoside Rh1 in 3T3-L1 cells, mRNA is extracted on 18 h and 24 h for Pref-1, C/EBP-δ and GR and day 8 for PPAR-γ, C/EBP-α, FAS, aFABP. Then, the expression profiles of adipocyte-specific genes are investigated by RT-PCR. PPAR-γ, C/EBP-α, FAS, and aFABP expressions are significantly increased in DMI-stimulated differentiated adipocyte compared to those of non-stimulated adipocyte cells. However, treatment with DMI in the presence of Ginsenoside Rh1 significantly suppresses the expression levels of PPAR-γ, C/EBP-α, FAS, and aFABP in a dose-dependent manner, whereas the expression levels of Pref-1, C/EBP-δ and GR are not affected [1].

In Vivo: When high-fat diet (HFD) fed mice for 8 weeks, body and epididymal fat weight gains are significantly increased compared to those of low-fat diet (LFD)-fed mice. However, when Ginsenoside Rh1 is treated in HFD-fed mice, body and epididymal fat weight gains are significantly decrease compared with those of the HFD-fed mice. TG, glucose, insulin, total cholesterol, and HDL levels in the blood are significantly increased in HFD-fed mice group compared to LFD-fed mice group. Treatment with Ginsenoside Rh1 in HFD-fed mice significantly lowers TG level alone<sup>[1]</sup>.

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