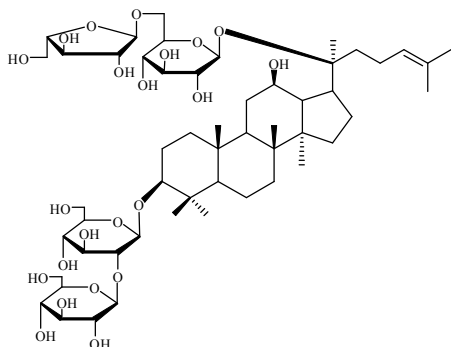


Ginsenoside-Rc from *Panax ginseng* C.A.Mey.



Product Name: 3-O- [β- D- glucopyranosyl - (1→2) - β -D-glucopyranosyl]-20-O-[α-L-arabinofuranosyl-(1→6) -β-D-glucopyranosyl]-dammar-24-ene-3β,12β,20S-triol

Product Number: G016004

CAS Number: 11021-14-0

Formula (Hill method): C₅₃H₉₀O₂₂

Formula Weight: 1079.27 AMU

Purity(HPLC): ≥ 98.00 %

Stock Status: In Stock

Solubility: 10 mM in DMSO

Mechanisms: Pathways: Others; Target: Others

Biological Activity: Ginsenoside Rc is a steroid glycoside, and triterpene saponins, found exclusively in the plant genus *Panax* (ginseng); have properties that inhibit or prevent tumors growth.

IC50 Value & Target:

In vitro: Rc reduced the proliferation and viability of 3T3-L1 preadipocytes in a dose-dependent manner. Treatment with Rc decreased the number of adipocytes and reduced lipid accumulation in maturing 3T3-L1 preadipocytes, demonstrating an inhibitory effect on lipogenesis. Rc directly induced lipolysis in adipocytes and down-regulated the expression of major transcription factors of the adipogenesis pathway, such as PPARγ and C/EBPα [1].

Overexpression of catalase induced by Rc resulted in suppression of RS production in kidney human embryo kidney 293T cells (HEK293T) cells, and that oxidative stress induced activation of PI3K/Akt and inhibition of the AMPK pathway and FoxO1 phosphorylation, leading to down-regulation of catalase, a FoxO1-targeting gene. In addition, treatment of HEK293T cells with Rc resulted in cAMP-response element-binding protein (CREB)-binding protein (CBP) regulated FoxO1 acetylation [2].

References:

- [1]. Yang JW, et al. Ginsenoside Rc promotes anti-adipogenic activity on 3T3-L1 adipocytes by down-regulating C/EBPα and PPARγ. *Molecules*. 2015 Jan 14;20(1):1293-303.
- [2]. Kim DH, et al. Ginsenoside Rc modulates Akt/FoxO1 pathways and suppresses oxidative stress. *Arch Pharm Res*. 2014 Jun;37(6):813-20.

Caution: Not fully tested. For research purposes only!

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