

# 11-Oxo-mogroside V Datasheet

4<sup>th</sup> Edition (Revised in July, 2016)

## [ Product Information ]

**Name:** 11-Oxo-mogroside V

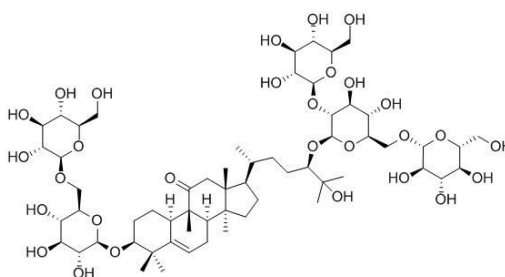
**Catalog No.:** CFN90365

**Cas No.:** 126105-11-1

**Purity:**  $\geq 98\%$

**M.F:** C<sub>60</sub>H<sub>100</sub>O<sub>29</sub>

**M.W:** 1285.42



**Physical Description:** Powder

**Synonyms:** (1S,4R,9 $\beta$ ,24R)-1-[[6-O-( $\beta$ -D-Glucopyranosyl)- $\beta$ -D-glucopyranosyl]oxy]-25-hydroxy-9,10,14-trimethyl-11-oxo-4,9-cyclo-9,10-secocholest-5-en-24-yl- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -D-glucopyranoside;

Estr-5-en-11-one, 17-[(1R,4R)-4-[[O- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)-O-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -D-glucopyranosyl]oxy]-5-hydroxy-1,5-dimethylhexyl]-3-[(6-O- $\beta$ -D-glucopyranosyl)- $\beta$ -D-glucopyranosyl]oxy]-4,4,9,14-tetramethyl-, (3 $\beta$ ,9 $\beta$ ,10 $\alpha$ ,17 $\beta$ )-.

## [ Intended Use ]

1. Reference standards;
2. Pharmacological research;
3. Food research;
4. Synthetic precursor compounds;
5. Intermediates & Fine Chemicals;
6. Others.

## **[ Source ]**

The fruits of *Siraitia grosvenorii* Swingle.

## **[ Biological Activity or Inhibitors ]**

11-Oxo-mogroside V and mogroside V, two natural sweeteners isolated from the fruits of *Momordica grosvenori*, exhibit strong inhibitory effect on the primary screening test indicated by the induction of Epstein-Barr virus early antigen (EBV-EA) by a tumor promoter, 12-O-tetradecanoylphorbol-13-acetate (TPA); they exhibit the significant inhibitory effects on the two-stage carcinogenesis test of mouse skin tumors induced by peroxy nitrite (ONOO) as an initiator and TPA as a promoter; 11-oxo-mogroside V also exhibits the remarkable inhibitory effect on two-stage carcinogenesis test of mouse skin tumor induced by 7,12-dimethylbenz[a]anthracene (DMBA) as an initiator and TPA as a promoter.<sup>[1]</sup>

11-Oxo-mogroside V, a sweet element of *Siraitia grosvenori* (SG) extract, provides the anti-oxidative property of SG which might reduce the atherogenic potential of low-density lipoprotein (LDL).<sup>[2]</sup>

## **[ Solvent ]**

Pyridine, Methanol, Ethanol, etc.

## **[ HPLC Method ]<sup>[3]</sup>**

Mobile phase: Acetonitrile-H<sub>2</sub>O, gradient elution ;

Flow rate: 0.75 ml/min;

Column temperature: 40 °C;

The wave length of determination: 210 nm.

## **[ Storage ]**

2-8°C, Protected from air and light, refrigerate or freeze.

## **[ References ]**

- [1] Takasaki M, Konoshima T, Murata Y, *et al.* *Cancer Lett.*, 2003, 198(1):37-42.
- [2] Takeo E, Yoshida H, Tada N, *et al.* *J. Atheroscler. Thromb.*, 2002, 9(2):114-20.
- [3] Zhou J, Wang M Y, Li X B, *et al.* *Chinese Traditional & Herbal Drugs*, 2007, 38(2):196-8.

## **[ Contact ]**

**Address:**

S5-3 Building, No. 111, Dongfeng Rd.,  
Wuhan Economic and Technological Development Zone,  
Wuhan, Hubei 430056,  
China

**Email:** [info@chemfaces.com](mailto:info@chemfaces.com)

**Tel:** +86-27-84237783

**Fax:** +86-27-84254680

**Web:** [www.chemfaces.com](http://www.chemfaces.com)

**Tech Support:** [service@chemfaces.com](mailto:service@chemfaces.com)