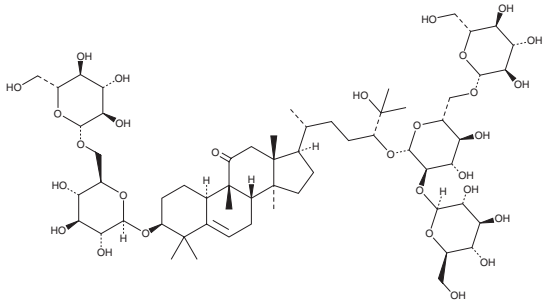
PRODUCT INFORMATION

11-oxo MGV

Item No. 22416

CAS Registry No.: 126105-11-1
Formal Name: (3β,9β,10α,24R)-24-[(O-β-D-glucopyranosyl-(1→2)-O-[β-D-glucopyranosyl-(1→6)]-β-D-glucopyranosyl)oxy]-3-[(6-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-25-hydroxy-9-methyl-19-norlanost-5-en-11-one
Synonym: 11-oxo Mogroside V
MF: $C_{60}H_{100}O_{29}$
FW: 1,285.4
Purity: ≥95%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

11-oxo MGV is supplied as a crystalline solid. A stock solution may be made by dissolving the 11-oxo MGV in the solvent of choice, which should be purged with an inert gas. 11-oxo MGV is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of 11-oxo MGV in these solvents is approximately 1 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of 11-oxo MGV can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 11-oxo MGV in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

11-oxo MGV is a sweet tasting cucurbitane glycoside derivative of mogroside V (Item No. 19853). It has antioxidant effects against both O_2^- and OH^- (EC_{50}s = 4.79 and 16.52 µg/ml, respectively) and prevents OH-induced DNA damage (EC_{50} = 3.09 µg/ml).[1] 11-oxo MGV also inhibits carcinogenesis in murine models.[2]

References

1. Chen, W.J., Wang, J., and Qi, X.Y. The antioxidant activities of natural sweeteners, mogrosides, from fruits of *Siraitia grosvenori*. *Int. J. Food Sci. Nutr.* **58(7)**, 548-556 (2007).
2. Takasaki, M., Konoshima, T., Murata, Y., *et al*. Anticarcinogenic activity of natural sweeteners, cucurbitane glycosides, from *Momordica grosvenori*. *Cancer Lett.* **198(1)**, 37-42 (2003).

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