PRODUCT INFORMATION



Mogroside IIIE

Item No. 39286

CAS Registry No.: 88901-37-5

Formal Name: $(3\beta,9\beta,10\alpha,11\alpha,24R)-3-(\beta-D-$

> glucopyranosyloxy)-11,25-dihydroxy-9methyl-19-norlanost-5-en-24-yl 2-O-β-

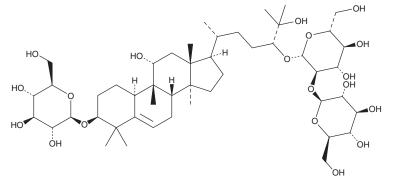
D-glucopyranosyl-β-D-glucopyranoside

Synonym: **MGIIIE** MF: $C_{48}H_{82}O_{19}$ FW: 963.2 ≥98% **Purity:** Supplied as: A solid -20°C Storage:

Item Origin: Plant/Siraitia grosvenorii (Swingle)

≥4 years

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



Laboratory Procedures

Mogroside IIIE is supplied as a solid. A stock solution may be made by dissolving the mogroside IIIE in the solvent of choice, which should be purged with an inert gas. Mogroside IIIE is slightly soluble in chloroform and methanol.

Description

Stability:

Mogroside IIIE is a cucurbitane glycoside that has been found in S. grosvenorii and has anti-inflammatory activity.¹⁻² It inhibits LPS-induced secretion of IL-1β, IL-6, and TNF-α from, as well as LPS-induced increases in toll-like receptor 4 (TLR4) levels in, RAW 264.7 macrophages when used at a concentration of 50 μM.¹ Mogroside IIIE (20 mg/kg) increases in bronchoalveolar lavage fluid (BALF) levels of IL-1β, IL-6, and TNF-a, and increases in lung tissue myeloperoxidase (MPO) activity in a mouse model of LPS-induced acute lung injury. It decreases lung fibrosis, as well as increases animal survival and reduces lung levels of matrix metalloproteinase-9 (MMP-9), in a mouse model of pulmonary fibrosis induced by the glycopeptide bleomycin (Item No. 13877) when administered at a dose of 20 mg/kg per day.² Formulations containing mogroside IIIE have been used as sweeteners in food products.

References

- 1. Tao, L., Cao, F., Xu, G., et al. Mogroside IIIE attenuates LPS-induced acute lung injury in mice partly through regulation of the TLR4/MAPK/NF-κB axis via AMPK activation. Phytother. Res. 31(7), 1097-1106
- 2. Tao, L., Yang, J., Cao, F., et al. Mogroside IIIE, a novel anti-fibrotic compound, reduces pulmonary fibrosis through toll-like receptor 4 pathways. J. Pharmacol. Exp. Ther. 361(2), 268-279 (2017).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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