

PRODUCT INFORMATION



Rebaudioside C

Item No. 11895

CAS Registry No.: 63550-99-2
Formal Name: (4 α)-13-[[O-6-deoxy- α -L-mannopyranosyl-(1 \rightarrow 2)-O-[β -D-glucopyranosyl-(1 \rightarrow 3)]]- β -D-glucopyranosyl]oxy]-kaur-16-en-18-oic acid, β -D-glucopyranosyl ester

Synonyms: Dulcoside B, Reb C

MF: C₄₄H₇₀O₂₂

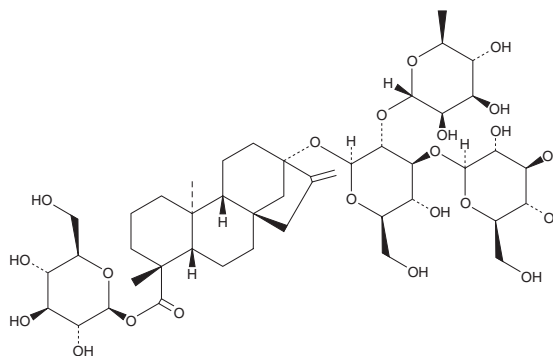
FW: 951.0

Purity: \geq 98%

Supplied as: A crystalline solid

Storage: -20°C

Stability: \geq 4 years



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

Laboratory Procedures

Rebaudioside C is supplied as a crystalline solid. A stock solution may be made by dissolving the rebaudioside C in the solvent of choice. Rebaudioside C is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of rebaudioside C 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 rebaudioside C can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of rebaudioside C in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Rebaudioside C is a natural non-caloric sweetener.^{1,2} It is one of the predominant steviol glycosides isolated from *S. rebaudiana* leaves.¹ Rebaudioside C, similarly to rebaudioside A (Item No. 11894), is metabolized by gut microbiota to steviol (Item No. 10011344), a compound whose safety is widely studied.^{3,4}

References

1. Makapugay, H.C., Nanayakkara, N.P.D., and Kinghorn, A.D. Improved high-performance liquid chromatographic separation of the *Stevia rebaudiana* sweet diterpene glycosides using linear gradient elution. *J. Chromatogr.* **283**, 390-395 (1984).
2. Prakash, I., Campbell, M., and Chaturvedula, V.S.P. Catalytic hydrogenation of the sweet principles of *Stevia rebaudiana*, Rebaudioside B, Rebaudioside C, and Rebaudioside D and sensory evaluation of their reduced derivatives. *Int. J. Mol. Sci.* **13(11)**, 15126-15136 (2012).
3. Purkayastha, S., Markosyan, A., Prakash, I., et al. Steviol glycosides in purified stevia leaf extract sharing the same metabolic fate. *Regul. Toxicol. Pharmacol.* **77**, 125-133 (2016).
4. Brusick, D.J. A critical review of the genetic toxicity of steviol and steviol glycosides. *Food Chem. Toxicol.* **46(Suppl 7)**, S83-S91 (2008).

WARNING

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

SAFETY DATA

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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