Stevioside (hydrate)
Item No. 11902

Formal Name: 13-[(2-O-β-D-glucopyranosyl-β-D-glucopyranosyl)oxy]-kaur-16-en-18-oic acid, (4α)-β-D-glucopyranosyl ester, monohydrate

MF: C_{38}H_{60}O_{18} • XH_{2}O

FW: 804.9

Purity: ≥95%

Supplied as: A solid

Storage: -20°C

Stability: ≥2 years

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

Laboratory Procedures

Stevioside (hydrate) is supplied as a solid. A stock solution may be made by dissolving the stevioside (hydrate) in the solvent of choice. Stevioside (hydrate) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of stevioside (hydrate) in ethanol and DMSO is approximately 10 mg/ml and approximately 17 mg/ml in DMF.

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 stevioside (hydrate) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of stevioside (hydrate) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Stevioside is a natural non-caloric sweetener. It is one of the steviol glycosides found in stevia, a natural sweetener extract isolated from the leaves of the plant S. rebaudiana. Stevioside has potential applications as a food additive or dietary supplement in diets designed to ameliorate obesity or conditions linked to glucose intolerance, like some forms of diabetes.

References