PRODUCT INFORMATION



Sennoside B

Item No. 28410

CAS Registry No.: 128-57-4

Formal Name: (9R,9'S)-5,5'-bis(β-D-

> glucopyranosyloxy)-9,9',10,10'tetrahydro-4,4'-dihydroxy-10,10'dioxo-[9,9'-bianthracene]-2,2'-

dicarboxylic acid

MF: $C_{42}H_{38}O_{20}$ FW: 862.8 **Purity:** ≥98%

 λ_{max} : 269, 366 nm UV/Vis.:

A solid Supplied as: Storage: -20°C Stability: ≥4 years

Item Origin: Plant/Sennae folium

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

Laboratory Procedures

Sennoside B is supplied as a solid. A stock solution may be made by dissolving the sennoside B in the solvent of choice, which should be purged with an inert gas. Sennoside B is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of sennoside B in these solvents is approximately 2 and 15 mg/ml, respectively.

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 sennoside B can be prepared by directly dissolving the solid in aqueous buffers. The solubility of sennoside B in PBS, pH 7.2, is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Sennoside B is a glycoside that has been found in C. acutifolia and has laxative and gastroprotective activities. 1.2 It inhibits H+/K+-ATPase activity in isolated rat stomach mucosa and increases levels of prostaglandin E₂ (PGE₂; Item No. 14010) in AGS gastric cells when used at a concentration of 100 μM.² Sennoside B (100 mg/kg) increases the intestinal transport rate by 72.2% but has no effect on the gastric emptying rate in mice. It reduces lesion indices by 39.9 and 62.9% in HCI/ethanol-induced gastritis and indomethacin-induced gastric ulcers, respectively, in rats when administered at a dose of 100 mg/kg. Formulations containing sennoside B have been used in the treatment of constipation.

References

- 1. Franz, G. The senna drug and its chemistry. Pharmacology 47(Suppl 1), 2-6 (1993).
- 2. Hwang, I.Y. and Jeong, C.S. Gastroprotective activities of sennoside A and sennoside B via the up-regulation of prostaglandin E2 and the inhibition of H+/K+-ATPase. Biomol. Ther. (Seoul) 23(5), 458-464 (2015).

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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