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Product Information

Casanthranol

Product Number **C 3298**

Storage Temperature 2-8 °C

Product Description

CAS Number: 8024-48-4

Casanthranol is a mixture of anthranol glycosides that is isolated from the plant cascara sagrada (*Rhamnus purshiana*), which is also known as sacred bark. The constituents of casanthranol include cascarioside A. Casanthranol has been classified as containing two fractions, casanthranol A and casanthranol B. Oxidative hydrolysis of both fractions yields different products:

- Casanthranol A yields emodin (Product No. E 7881).
- Casanthranol B yields traces of chrysophanic acid and its aglycone, and aloe-emodin.¹

An analysis of casanthranol as isolated from cascara sagrada bark has been reported.²

Whole cascara and the components of casanthranol have been applied to mutagenesis and pharmacology research. Emodin, danthron and aloe-emodin have been shown to cause mutations in mouse lymphoma L5178Y cells and to alter topoisomerase II activity.³ Cascara treatment of rats has been performed to probe its effect on constitutive and inducible nitric oxide synthase activity in the rat colon.⁴ The effect of sodium dioctyl sulfosuccinate on the cathartic action of casanthranol in animals has been studied.⁵

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions

The solubility of this product is evaluated in water (10 mg/ml), with heat as needed, yielding a slightly hazy to turbid, bright yellow to brown solution.

References

1. The Merck Index, 12th ed., Entry #1929.
2. Mahran, G. H., The constituents and active principles of cascara bark. Proc. Pharm. Soc. Egypt, **39(12)**, 161-165 (1957).
3. Muller, S. O., et al., Genotoxicity of the laxative drug components emodin, aloe-emodin and danthron in mammalian cells: topoisomerase II mediated? Mutat. Res., **371(3-4)**, 165-173 (1996).
4. Nadir, A., et al., Cascara sagrada-induced intrahepatic cholestasis causing portal hypertension: case report and review of herbal hepatotoxicity. Am. J. Gastroenterol., **95(12)**, 3634-3637 (2000).
5. Lundholm, L., and Svedmyr, N., The influence of dioctyl sodium sulfosuccinate on the laxative action of some anthraquinone derivatives. Acta Pharm. Toxicol., **15**, 373-383 (1959).

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