α-Spinasterol
Item No. 14197

CAS Registry No.: 481-18-5
Formal Name: (3β,5α,22E)-stigmasta-7,22-dien-3-ol
Synonyms: Bessisterol, Hitodesterol
MF: C_{29}H_{48}O
FW: 412.7
Purity: ≥95%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years

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

Laboratory Procedures

α-Spinasterol is supplied as a crystalline solid. A stock solution may be made by dissolving the α-spinasterol in the solvent of choice. α-Spinasterol is soluble in organic solvents such as ethanol and dimethyl formamide, which should be purged with an inert gas. The solubility of α-spinasterol in these solvents is approximately 0.25 and 1 mg/ml, respectively.

Description

α-Spinasterol is a bioavailable phytosterol originally isolated from spinach that acts as an antagonist at the transient receptor potential vanilloid type 1 (TRPV1) receptor (IC_{50} = 1.4 μM).\textsuperscript{1,2} It has antinociceptive effects in a noxious heat-induced pain test and also reduces hyperalgesia and edema in a complete Freund’s adjuvant-induced inflammatory pain test in mice at a dose of 0.3 μmol/kg. α-Spinasterol increases the seizure threshold in a dose-dependent manner and reduces depressive-like behavior in mice.\textsuperscript{3,4} It also has anti-inflammatory activity in vivo and inhibits benign prostatic hyperplasia in rats.\textsuperscript{5,6}

References