PRODUCT INFORMATION

(1R,9S)-(–)-β-Hydrastine
Item No. 22363

CAS Registry No.: 118-08-1
Formal Name: (3S)-6,7-dimethoxy-3-[(5R)-5,6,7,8-tetrahydro-6-methyl-1,3-dioxolo[4,5-g]isoquinolin-5-yl]-1(3H)-isobenzofuranone
MF: C21H21NO6
FW: 383.4
Purity: ≥98%
UV/Vis.: λmax: 299 nm
Supplied as: A crystalline 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

(1R,9S)-(–)-β-Hydrastine is supplied as a crystalline solid. A stock solution may be made by dissolving the (1R,9S)-(–)-β-hydrastine in the solvent of choice. (1R,9S)-(–)-β-Hydrastine is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of (1R,9S)-(–)-β-hydrastine in these solvents is approximately 10 mg/ml.

Description

(1R,9S)-(–)-β-Hydrastine is an enantiomer of the alkaloid hydrastine that inhibits dopamine biosynthesis (IC50 = 20.7 µM in PC12 cells) by inhibiting tyrosine hydroxylase activity.1,2 It inhibits dopamine release with an IC50 value of 66.5 µM in the presence of high extracellular K+ levels. It also inhibits L-type and caffeine-activated store-operated Ca2+ channels and prevents Ca2+ leakage from intracellular stores.3,4

References