PRODUCT INFORMATION

(±)-Talinolol
Item No. 16116

CAS Registry No.: 57460-41-0
Formal Name: N-cyclohexyl-N’-[4-[3-[1,1-dimethylethyl]amino]-2-hydroxypropoxy]phenyl]-urea
MF: C_{20}H_{33}N_{3}O_{3}
FW: 363.5
Purity: ≥95%
UV/Vis.: λ_{max}: 203, 245, 292 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.

Labormatory Procedures

(±)-Talinolol is supplied as a crystalline solid. A stock solution may be made by dissolving the (±)-talinolol in the solvent of choice. (±)-Talinolol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of (±)-talinolol in these solvents is approximately 10, 15, and 30 mg/ml, respectively.

(±)-Talinolol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, (±)-talinolol should first be dissolved in DMF and then diluted with the aqueous buffer of choice. (±)-Talinolol has a solubility of approximately 0.05 mg/ml in a 1:20 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

(±)-Talinolol is a β₁-selective adrenoceptor antagonist well known for its cardioprotective and antihypertensive activity. By blocking β₁-adrenergic receptors, talinolol delays the conduction of stimuli in the AV node, reduces the sino-atrial conduction time, and impedes the sinus node automaticity. Because its metabolism in human liver microsomes is well understood, (±)-talinolol is useful for examining the activity of the drug-transporting MDR1 gene product P-glycoprotein.

References