PRODUCT INFORMATION

Sonepiprazole
Item No. 11983

CAS Registry No.: 170858-33-0
Formal Name: \(4-[4-[2-[(1S)-3,4\text{-dihydro-1H-2\text{-benzopyran-1-yl]ethyl}-1-piperazinyl}]\text{-benzenesulfonamide}\)

Synonyms: PNU 101387, U-101387
MF: \(C_{21}H_{27}N_3O_3S\)
FW: 401.5
Purity: ≥98%
UV/Vis.: \(\lambda_{\text{max}}^\text{c}: 265 \, \text{nm}\)
Supplied as: A crystalline solid
Storage: -80°C
Stability: ≥2 years

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

Laboratory Procedures

Sonepiprazole is supplied as a crystalline solid. A stock solution may be made by dissolving the sonepiprazole in the solvent of choice. Sonepiprazole is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of sonepiprazole in ethanol is approximately 200 μg/ml and approximately 30 mg/ml in DMSO and DMF.

Description

Sonepiprazole is a selective antagonist of the dopamine 4 (D₄) receptor (Kᵢₛ = 10 nM). It is highly selective over D₁, D₂, and D₃ receptors, serotonin 1A and 2 receptors, as well as α₁- and α₂-adrenergic receptors (Kᵢₛ > 2,000 nM).¹² Its safety profile in rat studies is improved in comparison to classical antipsychotics but it is not effective for positive or negative symptoms of schizophrenia in patients.¹³ In a pharmacological model of stress exposure in rhesus monkeys, sonepiprazole reverses stress-induced cognitive deficits.⁴

References