PRODUCT INFORMATION

Pitofenone (hydrochloride)
Item No. 23865

CAS Registry No.: 1248-42-6
Formal Name: 2-([4-[(1-piperidinyl)ethoxy]benzoyl]-benzoic acid, methyl ester, monohydrochloride
MF: C₂₂H₂₅NO₄ • HCl
FW: 403.9
Purity: ≥98%
UV/Vis.: λmax = 279 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

Pitofenone (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the pitofenone (hydrochloride) in the solvent of choice. Pitofenone (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of pitofenone (hydrochloride) in ethanol and DMF is approximately 30 mg/ml and approximately 25 mg/ml in DMSO.

Pitofenone (hydrochloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, pitofenone (hydrochloride) should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Pitofenone (hydrochloride) has a solubility of approximately 0.16 mg/ml in a 1:5 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Pitofenone is an antispasmodic agent and an inhibitor of acetylcholinesterase (AChE; K_i = 36 and 45 μM for bovine erythrocyte and electric eel enzyme, respectively). It inhibits acetylcholine-induced contractions of isolated guinea pig ileum when used at a concentration of 2.5 μM.

References