

PRODUCT INFORMATION



Pitofenone (hydrochloride)

Item No. 23865

CAS Registry No.: 1248-42-6
Formal Name: 2-[4-[2-(1-piperidinyl)ethoxy]benzoyl]-benzoic acid, methyl ester, monohydrochloride

MF: C₂₂H₂₅NO₄ • HCl
FW: 403.9

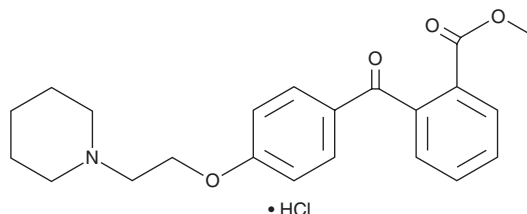
Purity: ≥98%

UV/Vis.: λ_{max}: 279 nm

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

Pitofenone (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the pitofenone (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Pitofenone (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). 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_s = 36 and 45 μM for bovine erythrocyte and electric eel enzyme, respectively).¹ It inhibits acetylcholine-induced contractions of isolated guinea pig ileum when used at a concentration of 2.5 μM.²

References

1. Punekar, N.S. and Kulkarni, A.V. Acetylcholinesterase inhibition by pitofenone: A spasmolytic compound. *Biotechnol. Appl. Biochem.* **14**(3), 378-382 (1991).
2. Kulkarni, S.K., Patil, C.S., and Singh, A. Modulatory effect of diclofenac on antispasmodic effect of pitofenone in cholinergic spasm. *Indian J. Exp. Biol.* **42**(6), 567-569 (2004).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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