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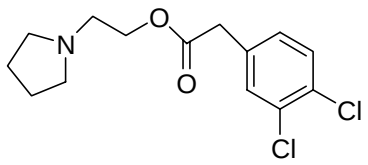
ProductInformation

AC915
Product Number **A 3595**

tore at Room Temperature

Synonyms: N-(2-(3,4-dichlorophenyl)acetoxy)-ethylpyrrolidine



$(COOH)_2$

Product Description
Molecular Formula: $C_{14}NO_2Cl_2H_{17} \bullet (COOH)_2$
Molecular Weight: 392.24

The sigma (σ) receptor system has at least two subtypes, σ_1 and σ_2, with distinct pharmacological properties.[1] The gene for the σ_1 receptor was recently cloned and its product represents a novel protein.[2] Attempts at cloning of the σ_2 receptor have been unsuccessful, largely due to the lack of selective, high-affinity σ_2 ligands. Characterization of the σ_2 receptor is possible in the presence of chiral σ_1 blockers, such as (+)-opiods, but use of a chiral ligand is not ideal.[1]

AC915 is an achiral molecule that displays >2000-fold selectivity for the σ_1 receptor over σ_2 receptor.[3] AC915 is similar in structure to BD1008, which nonselectively blocks both σ receptor subtypesThe replacement of the amine linkage of BD1008, by an ester linkage in AC915 appears to be responsible for the reduced binding affinity of AC915 for the at σ_2 receptor. Thus, AC915 possesses the elements required to serve as a σ_1 masking agent in σ_2 binding assays.

Preparation Instructions
Soluble in water, 18 mg/ml with heating.

Storage/Stability
Store at room temperature.

References
1. Quirion, R., et al., Trends Pharmacol. Sci., **13**, 85-86 (1992).
2. Hanner, M. et al., Proc. Natl. Acad. Sci. USA, **93**, 8072-8077 (1996).
3. Maeda, D.Y. et al., Bioorg. Med. Chem. Lett., **10**, 17-18 (2000).

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