

Product Name: TC-G 1000

Catalog No.: 5021

Batch No.: 1

CAS Number: 245744-18-7

IUPAC Name: 4-(6,7-Dihydro-1,3-dimethylbenzo[c]thien-4-yl)-1*H*-imidazole maleate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₃H₁₄N₂S.C₄H₄O₄

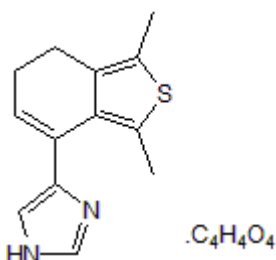
Batch Molecular Weight: 346.4

Physical Appearance: White solid

Solubility: DMSO to 100 mM

Storage: Desiccate at RT

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.1 (Dichloromethane:Methanol [9:1])

HPLC: Shows >99.8% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	58.94	5.24	8.09
Found	59.01	5.25	8.11

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Description:

Potent and selective α_{2D} -adrenoceptor agonist (K_i values are 8.6 pM and 110 nM for rat α_{2D} and α_1 receptors respectively and 25, 26 and 100 nM for human α_{2A} , α_{2C} and α_{2B} receptors respectively. Exhibits analgesic activity in a mouse model of abdominal irritation. Orally active.

Physical and Chemical Properties:

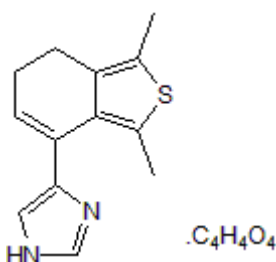
Batch Molecular Formula: $C_{13}H_{14}N_2S \cdot C_4H_4O_4$

Batch Molecular Weight: 346.4

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



References:

Ross *et al* (2000) α_2 adrenoceptor agonists as potential analgesic agents. 2. Discovery of 4-(4-Imidazo)-1,3-dimethyl-6,7-dihydrothianaphthene as a high-affinity ligand for the α_{2D} adrenergic receptor. *J.Med.Chem.* **43** 1423. PMID: 10715142.

Storage: Desiccate at RT

Solubility & Usage Info:

DMSO to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

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