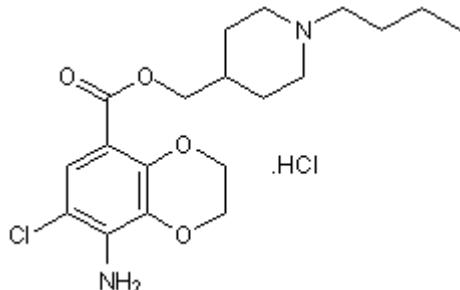


Certificate of Analysiswww.tocris.com**Product Name:** SB 204070**Catalog No.:** 1373**Batch No.:** 1**CAS Number:** 148688-01-1**IUPAC Name:** 8-Amino-7-chloro-2,3-dihydro-1,4-benzodioxan-5-carboxylic acid, 1'-butyl-4'-piperidinylmethyl ester hydrochloride**1. PHYSICAL AND CHEMICAL PROPERTIES****Batch Molecular Formula:** C₁₉H₂₇ClN₂O₄.HCl**Batch Molecular Weight:** 419.34**Physical Appearance:** Off-white solid**Solubility:** DMSO to 100 mM**Storage:** Desiccate at RT**Batch Molecular Structure:****2. ANALYTICAL DATA****TLC:** R_f = 0.4 (Dichloromethane:Methanol:Ammonia soln. [90:9:1])**HPLC:** Shows 99.2% purity**¹H NMR:** Consistent with structure**Mass Spectrum:** Consistent with structure**Microanalysis:** Carbon Hydrogen Nitrogen

Theoretical 54.42 6.73 6.68

Found 54.46 6.67 6.77

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Product Name: SB 204070

Catalog No.: 1373

Batch No.: 1

CAS Number: 148688-01-1

IUPAC Name: 8-Amino-7-chloro-2,3-dihydro-1,4-benzodioxan-5-carboxylic acid, 1'-butyl-4'-piperidinylmethyl ester hydrochloride

Description:

Potent and selective 5-HT₄ receptor antagonist ($pIC_{50} = 10.1$). Displays >5000-fold selectivity for 5-HT₄ over 5-HT_{1A}, 5-HT_{1D}, 5-HT_{1E}, 5-HT_{2A}, 5-HT_{2C}, and 5-HT₃ receptors. Exhibits anxiolytic activity upon systemic administration *in vivo*.

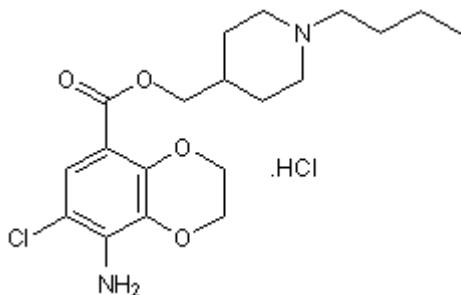
Physical and Chemical Properties:

 Batch Molecular Formula: C₁₉H₂₇ClN₂O₄.HCl

Batch Molecular Weight: 419.34

Physical Appearance: Off-white solid

Minimum Purity: >98%

Batch Molecular Structure:

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.

References:

Gaster *et al* (1993) (1-Butyl-4-piperidinyl)methyl 8-amino-7-chloro-1,4-benzodioxane-5-carboxylate hydrochloride: a highly potent and selective 5-HT₄ antagonist derived from metoclopramide. *J.Med.Chem.* **36** 4121. PMID: 8258837.

Bingham *et al* (1995) Antagonism by SB 204070 of 5-HT-evoked contractions in the dog stomach: an *in-vivo* model of 5-HT₄ receptor function. *J.Pharm.Pharmacol.* **47** 219. PMID: 7602484.

Prins *et al* (2000) An improved *in vitro* bioassay for the study of 5-HT₄ receptors in the human isolated large intestine circular muscle. *Br.J.Pharmacol.* **129** 1601. PMID: 10780964.

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