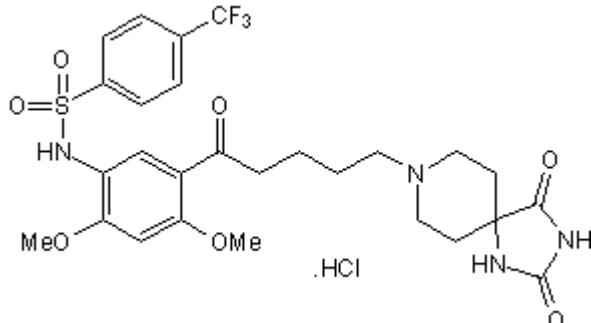


Certificate of Analysiswww.tocris.com**Product Name:** RS 102221 hydrochloride**Catalog No.:** 1050**Batch No.:** 10**CAS Number:** 187397-18-8**IUPAC Name:** 8-[5-(2,4-Dimethoxy-5-(4-trifluoromethylphenylsulphonamido)phenyl-5-oxopentyl]-1,3,8-triazaspiro[4.5]decane-2,4-dione hydrochloride**1. PHYSICAL AND CHEMICAL PROPERTIES****Batch Molecular Formula:** C₂₇H₃₁F₃N₄O₇S.HCl.H₂O**Batch Molecular Weight:** 667.1**Physical Appearance:** White solid**Solubility:** DMSO to 100 mM**Storage:** Store at RT**Batch Molecular Structure:****2. ANALYTICAL DATA****TLC:** R_f = 0.32 (Dichloromethane:Methanol [9:1])**HPLC:** Shows >98.4% purity**¹H NMR:** Consistent with structure**Mass Spectrum:** Consistent with structure**Microanalysis:** Carbon Hydrogen Nitrogen

Theoretical 48.61 5.14 8.4

Found 48.32 5 8.19

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bio-technne.com

info@bio-technne.com

techsupport@bio-technne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-technne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of Worldwww.tocris.com/distributors

Tel: +1 612 379 2956

Product Name: RS 102221 hydrochloride

Catalog No.: 1050 **Batch No.:** 10

CAS Number: 187397-18-8

IUPAC Name: 8-[5-(2,4-Dimethoxy-5-(4-trifluoromethylphenylsulphonamido)phenyl-5-oxopentyl]-1,3,8-triazaspiro[4.5]decane-2,4-dione hydrochloride

Description:

Potent and selective 5-HT_{2C} antagonist ($pK_i = 8.7$). Displays ~100-fold selectivity over the 5-HT_{2A} and 5-HT_{2B} subtypes and is > 100-fold selective over other 5-HT receptors, α - and β -adrenergic and muscarinic ACh receptors.

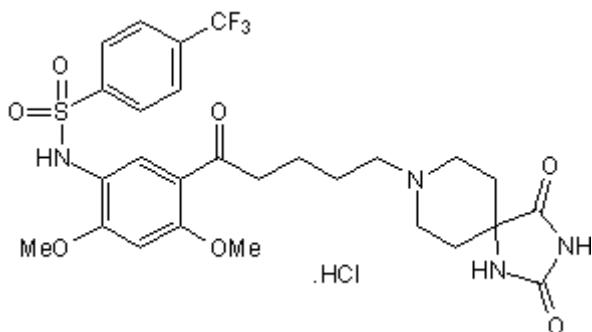
Physical and Chemical Properties:

Batch Molecular Formula: C₂₇H₃₁F₃N₄O₇S.HCl.H₂O

Batch Molecular Weight: 667.1

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:

Storage: Store 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:

Weinhardt et al (1996) Some benzenesulphonamido-substituted valerophenones that are selective antagonists for the 5-HT_{2C} receptor. *Bioorg.Med.Chem.Lett.* **6** 2687.

Bonhaus et al (1997) RS-102221: a novel high affinity and selective 5-HT_{2C} receptor antagonist. *Neuropharmacology* **36** 621. PMID: 9225287.

Bonhaus et al (1998) Absorption and brain penetration of a high affinity, highly selective 5-HT_{2C} receptor antagonist, RS-102221. *Ann.N.Y.Acad.Sci.* **861** 269. PMID: 9928284.

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