



Certificate of Analysis

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Product Name: RS 102221 hydrochloride Catalog No.: 1050 Batch No.: 14

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: $C_{27}H_{31}F_3N_4O_7S.HCl.\frac{1}{2}H_2O$

Batch Molecular Weight: 658.09 **Physical Appearance:** White solid

Solubility: DMSO to 100 mM

Storage: Store at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.4$ (Dichloromethane:Methanol:Ammonia soln. [90:9:1])

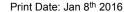
HPLC: Shows 99.1% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 49.28 5.05 8.51 Found 49.15 4.85 8.45





Product Information

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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.½H₂O

Batch Molecular Weight: 658.09 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).

Catalog No.: 1050

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.