

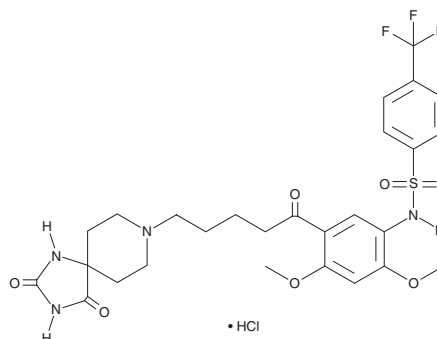
PRODUCT INFORMATION



RS 102221 (hydrochloride)

Item No. 31543

CAS Registry No.: 187397-18-8
Formal Name: N-[5-[5-(2,4-dioxo-1,3,8-triazaspiro[4.5]dec-8-yl)-1-oxopentyl]-2,4-dimethoxyphenyl]-4-(trifluoromethyl)benzenesulfonamide, monohydrochloride
MF: C₂₇H₃₁F₃N₄O₇S • HCl
FW: 649.1
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

RS 102221 (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the RS 102221 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. RS 102221 (hydrochloride) is soluble in the organic solvent DMSO at a concentration of approximately 100 mM.

Description

RS 102221 is an antagonist of the serotonin (5-HT) receptor subtype 5-HT_{2C}.¹ It binds to 5-HT_{2C} receptors (K_i = 3.8 nM for the recombinant human receptor) and is selective for 5-HT_{2C} receptors over 5-HT_{2A} and 5-HT_{2B} receptors (K_is = 1,122.02 and 812.83 nM, respectively), as well as a panel of additional neurotransmitter receptors and ion channels (K_is = ≥316.23 nM for all). RS 102221 inhibits 5-HT-induced increases in the extracellular media acidification rate of CHO-K1 cells expressing human 5-HT_{2C} receptors (pA₂ = 8.1). It increases food intake and weight gain in rats when administered at a dose of 2 mg/kg. RS 102221 (2 mg/kg) increases the time spent in the light compartment in the light-dark exploration test in mice and reduces prepulse inhibition of the startle reflex when administered at a dose of 1 mg/kg.²

References

1. Bonhaus, D.W., Weinhardt, K.K., Taylor, M., *et al.* RS-102221: A novel high affinity and selective, 5-HT_{2C} receptor antagonist. *Neuropharmacology* **36**(4-5), 621-629 (1997).
2. Kuznetsova, E.G., Amstislavskaya, T.G., Shefer, E.A., *et al.* Effect of 5-HT_{2C} receptor antagonist RS 102221 on mouse behavior. *Bull. Exp. Biol. Med.* **142**(1), 76-79 (2006).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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