Datasheet

**Product overview**

**Name**
MDL 100907

**Cat No**
HB1780

**Short description**
Potent and selective 5-HT2A receptor antagonist

**Biological description**
Potent and selective 5-HT2A receptor antagonist ($K_i = 0.36$ nM). Shows > 80-fold selectivity for 5-HT2A over other 5-HT receptor subtypes. Displays antipsychotic actions. Active *in vivo*.

**Alternative names**
Volinanserin

**Biological action**
Antagonist

**Purity**
>98%

**Properties**

**Chemical name**
(\(R\))-\(+\)\-(2,3-Dimethoxyphenyl)-1-[2 -(4-fluorophenyl)ethyl]-4-piperinemethanol

**Molecular Weight**
373.46

**Chemical structure**

![Chemical structure of MDL 100907](attachment:image)

**Molecular Formula**
C$_{22}$H$_{28}$FNO$_3$

**CAS Number**
139290-65-6

**PubChem identifier**
5311271

**SMILES**
COC1=CC=CC(=C1OC)[C@@H](C2CCN(CC2)CCC3=CC=C(C=C3)F)O

**Source**
Synthetic

**InChI**
InChI=1S/C22H28FNO3/c1-26-20-5-3-4-19(22(20)27-2)21(25)17-11-14-24(15-12-17)13-10-16-6-8-18(23)9-7-16/h3-9,17,21,25H,10-15H2,1-2H3/t21-/m1/s1

**InChiKey**
HXTGXYRHXAGCFP-OAQYLSRUSA-N

**MDL number**
MFCD00909060

**Appearance**
White solid

**Storing and Using Your Product**

**Storage instructions**
+4 °C

**Solubility overview**
Soluble in DMSO (100 mM) and in 0.05M HCl (50 mM)

**Important**
This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

**References for MDL 100907**
Preclinical characterization of the potential of the putative atypical antipsychotic MDL 100,907 as a potent 5-HT2A antagonist with a favorable CNS safety profile.

Kehne et al (1996) J Pharmacol Exp Ther 277(2) : 968-81

PubMedID: 8627580

The 5-hydroxytryptamine2A receptor antagonist R-(-)-alpha-(2,3-dimethoxyphenyl)-1-[2-(4-fluorophenyl)ethyl]-4-piperidinemethanol (M100907) attenuates impulsivity after both drug-induced disruption (dizocilpine) and enhancement (antidepressant drugs) of dif


PubMedID: 18772320

Characterization of the 5-HT2 receptor antagonist MDL 100907 as a putative atypical antipsychotic: behavioral, electrophysiological and neurochemical studies.

Sorensen et al (1993) J Pharmacol Exp Ther 266(2) : 684-91

PubMedID: 8102646