

## Certificate of Analysis

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**Product Name:** AVE 1625

**Catalog No.:** 6763

**Batch No.:** 1

CAS Number: 358970-97-5

IUPAC Name: *N*-[1-[Bis(4-chlorophenyl)methyl]-3-azetidyl]-*N*-(3,5-difluorophenyl)methanesulfonamide

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>23</sub>H<sub>20</sub>Cl<sub>2</sub>F<sub>2</sub>N<sub>2</sub>O<sub>2</sub>S

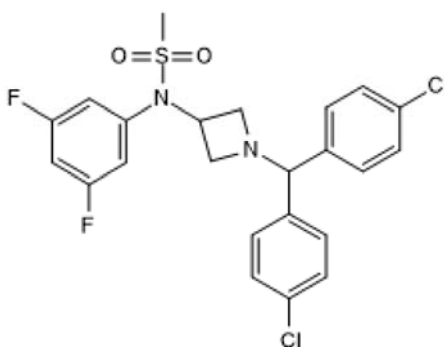
**Batch Molecular Weight:** 497.38

**Physical Appearance:** White solid

**Solubility:** DMSO to 100 mM

**Storage:** Store at -20°C

**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.34 (Ethyl acetate:Petroleum ether [3:7])

**HPLC:** Shows 100% purity

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	55.54	4.05	5.63
Found	55.68	4.03	5.66

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IUPAC Name: N-[1-[Bis(4-chlorophenyl)methyl]-3-azetidiny]-N-(3,5-difluorophenyl)methanesulfonamide

**Description:**

Potent and selective CB<sub>1</sub> receptor antagonist (IC<sub>50</sub> values are 25 and 10 nM for human and rat CB<sub>1</sub>R, respectively). Exhibits >400-fold selectivity for CB<sub>1</sub> over CB<sub>2</sub> receptors. Attenuates Olanzapine (Cat. No. 4349) induced weight gain and food intake in rats with no effect on energy expenditure or motility. Also improves cognitive function in rodent schizophrenia models and ameliorates extrapyramidal side-effects of antipsychotics.

**Physical and Chemical Properties:**

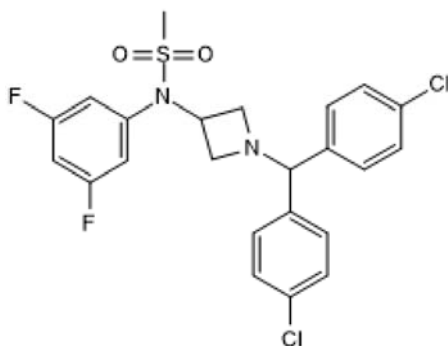
Batch Molecular Formula: C<sub>23</sub>H<sub>20</sub>Cl<sub>2</sub>F<sub>2</sub>N<sub>2</sub>O<sub>2</sub>S

Batch Molecular Weight: 497.38

Physical Appearance: White solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**Storage:** Store at -20°C

**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:**

**Black et al** (2011) AVE1625, a cannabinoid CB<sub>1</sub> receptor antagonist, as a co-treatment with antipsychotics for schizophrenia: improvement in cognitive function and reduction of antipsychotic-side effects in rodents. *Psychopharmacology (Berl.)* **215** 149. PMID: 21181124.

**Liebig et al** (2010) Profiling of energy metabolism in olanzapine-induced weight gain in rats and its prevention by the CB<sub>1</sub>-antagonist AVE1625. *Obesity* **18** 1952. PMID: 20168311.

**Herling et al** (2007) CB<sub>1</sub> receptor antagonist AVE1625 affects primarily metabolic parameters independently of reduced food intake in Wistar rats. *Am.J.Physiol.Endocrinol.Metab.* **293** E826. PMID: 17595216.

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