

# **Certificate of Analysis**

Print Date: Nov 12th 2018

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Product Name: Avagacestat Catalog No.: 6363 Batch No.: 1

CAS Number: 1146699-66-2

IUPAC Name: (2R)-2-[[(4-Chlorophenyl)sulfonyl][[2-fluoro-4-(1,2,4-oxadiazol-3-yl)phenyl]methyl]amino]-5,5,5-trifluoropentanamide

#### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>20</sub>H<sub>17</sub>ClF<sub>4</sub>N<sub>4</sub>O<sub>4</sub>S

**Batch Molecular Weight:** 520.89 **Physical Appearance:** White solid

Solubility: DMSO to 100 mM

ethanol to 20 mM

Storage: Store at +4°C

**Batch Molecular Structure:** 

#### 2. ANALYTICAL DATA

**HPLC:** Shows 98.8% purity

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

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 46.12 3.29 10.76 Found 46.13 3.25 10.71

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use



## **Product Information**

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#### **Description:**

Highly potent γ-secretase inhibitor ( $A\beta40~IC_{50}=0.3~nM$ ). Exhibits >137-fold selectivity for amyloid- $\beta$  precursor protein (APP) processing over Notch. Reduces plasma and brain Aβ40 and Aβ42 levels in vivo. Orally bioavailable.

#### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>20</sub>H<sub>17</sub>CIF<sub>4</sub>N<sub>4</sub>O<sub>4</sub>S

Batch Molecular Weight: 520.89 Physical Appearance: White solid

Minimum Purity: >98%

#### **Batch Molecular Structure:**

Storage: Store at +4°C

### Solubility & Usage Info:

DMSO to 100 mM ethanol to 20 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:

Albright *et al* (2013) Pharmacodynamics of selective inhibition of γ-secretase by avagacestat. J.Pharmacol.Exp.Ther. *344* 686. PMID: 23275065.

Gillman et al (2010) Discovery and evaluation of BMS-708163, a potent, selective and orally bioavailable γ-secretase inhibitor. ACS Med.Chem.Lett. 1 120. PMID: 24900185.