

Certificate of Analysis

www.tocris.com

Product Name: Begacestat Catalog No.: 4283 Batch No.: 1

CAS Number: 769169-27-9

IUPAC Name: 5-Chloro-*N*-[(1*S*)-3,3,3-trifluoro-1-(hydroxymethyl)-2-(trifluoromethyl)propyl]-2-thiophenesulfonamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C9H8CIF6NO3S2

Batch Molecular Weight: 391.74

Physical Appearance: White solid

Solubility: DMSO to 100 mM

ethanol to 100 mM

Storage: Store at +4°C

Batch Molecular Structure:

$$CI$$
 S
 S
 N
 CF_3
 CF_3

2. ANALYTICAL DATA

HPLC: Shows 100% purity

¹H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 27.59 2.06 3.58 Found 27.86 2.03 3.63





Product Information

Print Date: May 18th 2012

www.tocris.com

Product Name: Begacestat Catalog No.: 4283 Batch No.: 1

CAS Number: 769169-27-9

IUPAC Name: 5-Chloro-N-[(1S)-3,3,3-trifluoro-1-(hydroxymethyl)-2-(trifluoromethyl)propyl]-2-thiophenesulfonamide

Description:

 $\gamma\text{-secretase}$ inhibitor; selectively inhibits cleavage of amyloid precursor protein (APP) over Notch. Lowers levels of Aβ42 and Aβ40 (EC $_{50}$ values are 12.4 and 14.8 nM respectively in cells expressing human recombinant APP). Orally active.

Physical and Chemical Properties:

Batch Molecular Formula: _{C9H8CIF6NO3S2} Batch Molecular Weight: 391.74 Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:

$$CI$$
 S
 S
 N
 CF_3

Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 100 mM ethanol 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:

Mayer et al (2008) Discovery of begacestat, a Notch-1-sparing gamma secretase inhibitor for the treatment of Alzheimer's disease. J.Med.Chem. 51 7348. PMID: 19012391.

Martone *et al* (2009) Begacestat (GSI-953): a novel, selective thiophene sulfonamide inhibitor of amyloid precursor protein γ-secretase for the treatment of Alzheimer's disease. J.Pharmacol.Exp.Ther. *331* 598. PMID: 19671883.

