



Certificate of Analysis

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Product Name: SB 290157 trifluoroacetate Catalog No.: 6860 Batch No.: 1

CAS Number: 1140525-25-2

IUPAC Name: N^2 -[2-(2,2-Diphenylethoxy)acetyl]-L-arginine trifluoroacetate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₂H₂₈N₄O₄. CF₃CO₂H

Batch Molecular Weight: 526.51 **Physical Appearance:** White solid

Solubility: DMSO to 100 mM

ethanol to 100 mM

Storage: Desiccate at RT

Batch Molecular Structure:

CF3COOH

2. ANALYTICAL DATA

HPLC: Shows 99.2% purity

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

Optical Rotation: $[\alpha]_D = +3.6$ (Concentration = 1, Solvent = DMSO)

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 54.75 5.55 10.64 Found 54.55 5.36 10.52

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



Product Information

Print Date: Nov 9th 2020

Batch No.: 1

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CAS Number: 1140525-25-2

IUPAC Name: N^2 -[2-(2,2-Diphenylethoxy)acetyl]-L-arginine trifluoroacetate

Description:

Potent C3a receptor antagonist (IC_{50} values are 27 - 30 nM for C3a-induced Ca²⁺ mobilization in vitro and ex vivo). Inhibits C3a-induced chemotaxis in human mast cell line. Also inhibits tau hyperphosphorylation in vitro. Displays anti-inflammatory effects in animal models of airway inflammation and arthritis. Also inhibits glucose-induced insulin secretion and ATP production from ex vivo human and mouse pancreatic islets. Also exhibits C3a receptor agonist activity.

Physical and Chemical Properties:

Batch Molecular Formula: C₂₂H₂₈N₄O₄. CF₃CO₂H

Batch Molecular Weight: 526.51 Physical Appearance: White solid

Minimum Purity: ≥97%

Batch Molecular Structure:

CF₃COOH

Storage: Desiccate at RT. This product is packaged under an inert atmosphere.

Catalog No.: 6860

Solubility & Usage Info:

DMSO to 100 mM ethanol to 100 mM

CAUTION - This product is hygroscopic and we recommend that it is desiccated upon arrival. The product has been packed under inert atmosphere.

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:

Hu *et al* (2019) Complement C3a receptor antagonist attenuates tau hyperphosphorylation via glycogen synthase kinase 3β signaling pathways. Eur.J.Pharmacol. *850* 135. PMID: 30771350.

Atanes et al (2018) C3aR and C5aR1 act as key regulators of human and mouse β -cell function. Cell Mol.Life Sci. **75** 715. PMID: 28921001.

Mathieu et al (2005) The C3a receptor antagonist SB 290157 has agonist activity. Immunol.Lett. 100 139. PMID: 16154494.

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