PRODUCT INFORMATION



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CF₃COOH

SB 290157 (trifluoroacetate salt)

Item No. 15783

CAS Registry No.: 1140525-25-2

N²-[2-(2,2-diphenylethoxy)acetyl]-Formal Name:

L-arginine, 2,2,2-trifluoroacetate

MF: C₂₂H₂₈N₄O₄ • CF₃COOH

FW: 526.5 **Purity:** ≥95%

Supplied as: A crystalline solid

Storage: -20°C Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

SB 290157 (trifluoroacetate salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the SB 290157 (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. SB 290157 (trifluoroacetate salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of SB 290157 (trifluoroacetate salt) in these solvents is approximately 30, 20, and 25 mg/ml, respectively.

SB 290157 (trifluoroacetate salt) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, SB 290157 (trifluoroacetate salt) should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. SB 290157 (trifluoroacetate salt) has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

The anaphylatoxin C3a induces a range of responses by activating its G protein-coupled receptor, C3aR, resulting in calcium mobilization. SB 290157 is a non-peptide antagonist of C3aR, competitively blocking C3a binding with an IC₅₀ value of 200 nM.² It potently inhibits a wide variety of C3a-induced responses in cells, including calcium increase in human neutrophils (IC_{50} = 28 nM) and ATP release from guinea pig platelets (IC_{50} = 30 nM).² SB 290157 is also effective *in vivo*, reducing inflammation in a variety of animal models.²⁻⁴ It also significantly reduces or reverses diet-induced obesity in rats and accelerates the mobilization of hematopoietic progenitor cells to the peripheral blood in mice. 5.6 Notably, SB 290157 has C3aR agonist activity in some cell systems.^{7,8}

References

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WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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