

Certificate of Analysis

Product Name: SD 2590 hydrochloride

Catalog No.: 4775

Batch No.: 1

CAS Number: 226395-93-3

IUPAC Name: *N*-Hydroxy-1-(2-methoxyethyl)-4-[4-[4-(trifluoromethoxy)phenoxy]phenyl]sulfonyl]-4-piperidinecarboxamide hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₂H₂₅F₃N₂O₇S.HCl

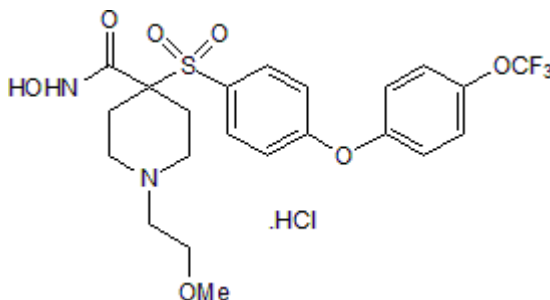
Batch Molecular Weight: 554.96

Physical Appearance: White solid

Solubility: water to 100 mM
DMSO to 100 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.1% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	47.61	4.72	5.05
Found	47.7	4.7	5.07

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

Product Name: SD 2590 hydrochloride

Catalog No.: 4775

Batch No.: 1

CAS Number: 226395-93-3

IUPAC Name: *N*-Hydroxy-1-(2-methoxyethyl)-4-[4-[4-(trifluoromethoxy)phenoxy]phenyl]sulfonyl]-4-piperidinecarboxamide hydrochloride

Description:

Potent MMP inhibitor (IC₅₀ values are <0.1, <0.1, 0.18, 1.7, 13 and 28.7 nM for MMP-2, -13, -9, -8, -14 and -3 respectively). Exhibits 100,000-fold selectivity for MMP-2 and -13 over MMP-1. Reduces left ventricular dilation in a myocardial infarction rat model. Orally bioavailable.

Physical and Chemical Properties:

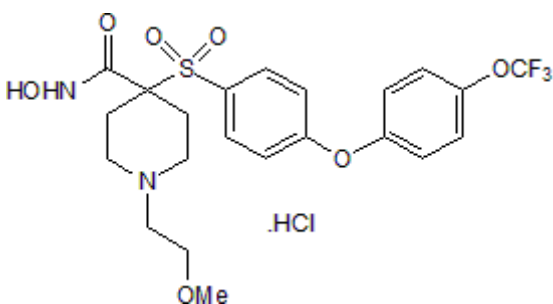
Batch Molecular Formula: C₂₂H₂₅F₃N₂O₇S.HCl

Batch Molecular Weight: 554.96

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

water to 100 mM
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:

Becker et al (2010) Orally active MMP-1 sparing α -tetrahydropyranyl and α -piperidinyl sulfone matrix metalloproteinase (MMP) inhibitors with efficacy in cancer, arthritis, and cardiovascular disease. *J.Med.Chem.* **53** 6653. PMID: 20726512.

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