

Certificate of Analysis

Print Date: Feb 14th 2022

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Product Name: Camostat mesylate Catalog No.: 3193 Batch No.: 2

CAS Number: 59721-29-8

IUPAC Name: 4-[[4-[(Aminoiminomethyl)amino]benzoyl]oxy]benzeneacetic acid 2-(dimethylamino)-2-oxoethyl ester

methanesulfonate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{20}H_{22}N_4O_5.CH_3SO_3H$

Batch Molecular Weight: 494.52 **Physical Appearance:** White solid

Solubility: water to 50 mM

DMSO to 100 mM

Storage: Desiccate at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 98.6% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 50.54 5.35 11.23 Found 50.34 5.28 11.11



Product Information

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Description:

Camostat mesylate is an orally active protease inhibitor. Inhibits trypsin and various inflammatory proteases including plasmin, kallikrein and thrombin. Suppresses pancreatitis-induced pain in rats following oral administration. Also inhibits transmembrane serine protease TMPRSS2 and partially blocks entry of SARS-Cov-2 (COVID-19) into lung cells in vitro. Tocris products are for biomedical research use only. They are not intended for human or veterinary use.

Physical and Chemical Properties:

Batch Molecular Formula: C₂₀H₂₂N₄O₅.CH₃SO₃H

Batch Molecular Weight: 494.52 Physical Appearance: White solid

Minimum Purity: ≥98%

Batch Molecular Structure:

Storage: Desiccate at RT

Solubility & Usage Info:

water to 50 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).

Catalog No.: 3193

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:

Hoffmann *et al* (2020) SARS-CoV-2 cell entry depends on ACE2 and TMPRSS2 and is blocked by a clinically-proven protease inhibitor. Cell *181* 271. PMID: 32142651 .

Ishikura et al (2007) The proteinase inhibitor camostat mesilate suppresses pancreatic pain in rodents. Life Sci. **80** 1999. PMID: 17433371.

Horiuchi et al (1990) Gabexate and camostat, synthetic proteinase inhibitors, as direct inducing factors of water and bicarbonate secretion in the isolated and blood-perfused dog pancreas. J.Pharmacol.Exp.Ther. 252 320. PMID: 1688943.

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