

## Catalog # 10-2196 Camostat mesilate

CAS# 59721-29-8

4-(2-(2-(Dimethylamino)-2-oxoethoxy)-2-oxoethyl)phenyl 4-guanidinobenzoate Methanesul-fonic acid salt; FOY-305; Foipan

Lot # X101538

A serine protease inhibitor inhibiting plasmin, kallikrein, thrombin as well as trypsin, which attenuates pancreatic fibrosis.<sup>1</sup> Reduces weight gain and improves metabolism in obese rodent models.<sup>2</sup> In clinical use (in Japan) for pancreatitis.<sup>3</sup> Inhibits influenza virus replication in human tracheal epithelial cells.<sup>4</sup> Reduces infection of Calu-3 lung cells by SARS-CoV-2 (responsible for COVID-19) via inhibition of the serine protease TMPRSS2 required for viral spike protein priming.<sup>5</sup>

- 1) Gibo et al. (2005), Camostat mesylate attenuates pancreatic fibrosis via inhibition of monocytes and pancreatic stellate cells activity; Lab Invest., 85 75
- 2) Albarazanji et al. (2019), Intestinal serine protease inhibition increases FGF21 and improves metabolism in obese mice.; Am. J. Physiol. Gastrointest. Liver Physiol., **316** G653
- 3) Ueda et al. (2015), The serine protease inhibitor camostat mesylate attenuates the progression of chronic kidney disease through its antioxidant effects; Nephron, 129 223
- 4) Yamaya et al. (2015), The serine protease inhibitor camostat inhibits influenza virus replication and cytokine production in primary cultures of human tracheal epithelial cells; Pulm. Pharmacol. Ther., 33 66
- 5) 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

## PHYSICAL DATA

Molecular Weight: 494.52

Molecular Formula:  $C_{20}H_{22}N_4O_5 \cdot CH_3SO_3H$ 

Purity: 98% by HPLC

NMR: (Conforms)

Solubility: DMSO (up to 50 mg/ml) or Water (up to 50 mg/ml)

Physical Description: Off-white solid

Storage and Stability: Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in

DMSO or distilled water may be stored at -20°C for up to 1 month.

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