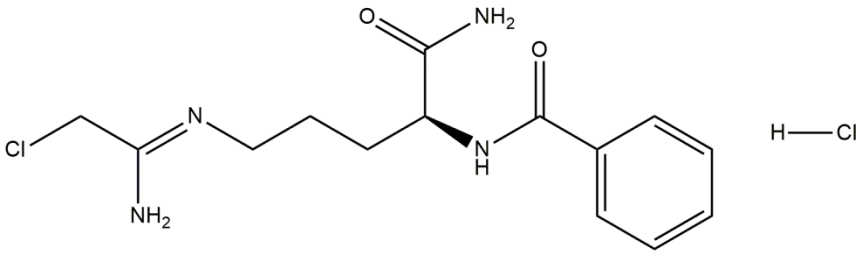
Cl-Amidine (hydrochloride)

ALTERNATE NAMES: Cl-amidine (hydrochloride), N-[(1S)-1-(Aminocarbonyl)-4-[(2-chloro-1-iminoethyl)amino]butyl]-benzamide hydrochloride, (2S)-5-(2-chloroethanimidamido)-2-(phenylformamido)pentanamide hydrochloride, (S)-N-(1-amino-5-(2-chloroacetimidamido)-1-oxopentan-2-yl)benzamide hydrochloride, N-(1S)-1-(Aminocarbonyl)-4-(2-chloro-1-iminoethyl)aminobutyl-benzamide hydrochloride

CATALOG #:
B2802-1 1 mg
B2802-5 5 mg

STRUCTURE:



MOLECULAR FORMULA: $C_{14}H_{20}Cl_2N_4O_2$

MOLECULAR WEIGHT: 347.24

CAS NUMBER: 1373232-26-8

APPEARANCE: Crystalline solid

PURITY: ≥95%

SOLUBILITY:
50 mg/ml in DMSO
14 mg/ml in DMF
~20 mg/ml in Ethanol

DESCRIPTION: Cl-Amidine (hydrochloride) is an irreversible pan-peptidylarginine deiminase (PAD) inhibitor. It catalyzes the post-translational modification of arginine residues on histones to form citrulline. The in vitro IC_{50} values are 5.9 ± 0.3 µM, 0.8 ± 0.3 µM, 6.2 ± 1.0 µM for PAD4, PAD1 and PAD3, respectively. It causes apoptosis in multiple cancer cell lines such as HL60, HT29, TK6, and U2-OS cells. It improves disease phenotypes in animal models of inflammatory arthritis and inflammatory bowel disease. It reduces the development of IgG autoantibodies in a collagen-induced mouse model of inflammatory arthritis.

STORAGE TEMPERATURE: -20ºC

HANDLING: Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

RELATED PRODUCTS:

GSK-484 hydrochloride (Cat. No. B1035)
GSK-121 trifluoroacetate (Cat. No. B1034)
GSK-106 hydrochloride (Cat. No. B1036)
GSK-199 hydrochloride (Cat. No. B1037)

DISCLAIMER: ***FOR RESEARCH USE ONLY! Not to be used on humans.***