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Data Sheet

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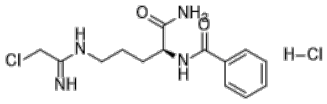
Product Name	:	Cl-amidine hydrochloride
Cat. No.	:	PC-22865
CAS No.	:	1373232-26-8
Molecular Formula	:	$C_{14}H_{19}ClN_4O_2 \cdot HCl$
Molecular Weight	:	347.24
Target	:	Protein Arginine Deiminase (PAD)
Solubility	:	10 mM in DMSO



Biological Activity

Cl-amidine hydrochloride is a potent, irreversible, orall active inhibitor of protein arginine deiminases (PADs) with IC50 of 0.8, 6.2, and 5.9 μM for PAD1, PAD3, and PAD4, respectively.
Cl-amidine is cytotoxic to HL-60, MCF-7, and HT-29 cancer cells (IC50s = 0.25, 0.05, and 1 μM, respectively).
Cl-amidine (50 mg/kg) reduces ex vivo extracellular neutrophil extracellular trap (NET) formation and increases survival in a mouse model of sepsis induced by cecal ligation and puncture (CLP).
Cl-amidine also decreases the citrulline content in serum and joints and reduces the development of IgG autoantibodies in a mouse model of collagen-induced arthritis in a dose-dependent manner.

References

Yuan Luo, et al. Biochemistry. 2006 Oct 3; 45(39): 11727–11736.

Witalison EE, et al. Oncotarget. 2015 Nov 3;6(34):36053-62.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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