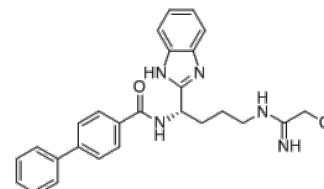


<b>Product Name</b>	: BB-Cl-Amidine
<b>Cat. No.</b>	: PC-20328
<b>CAS No.</b>	: 1802637-39-3
<b>Molecular Formula</b>	: C <sub>26</sub> H <sub>26</sub> ClN <sub>5</sub> O
<b>Molecular Weight</b>	: 459.98
<b>Target</b>	: Protein Arginine Deiminase (PAD)
<b>Solubility</b>	: 10 mM in DMSO



1. Humphries F, et al. *Proc Natl Acad Sci U S A*. 2023 Aug 15;120(33):e2305420120.

## Biological Activity

BB-Cl-Amidine is a **peptidylarginine deiminase (PAD)** inhibitor, irreversibly inactivates all four PAD subtypes (kinact/KI=16,100, 4,100, 6,800, and 13,300 M<sup>-1</sup>min<sup>-1</sup> for PAD1-4, respectively).

BB-Cl-Amidine also is a potent small-molecule inhibitor of **STING** targeting STING oligomerization.

BB-Cl-Amidine inhibits STING signaling and production of type I IFNs, IFN-stimulated genes (ISGs) and NFκB-dependent cytokines, but not other pattern recognition receptors.

BB-Cl-amidine alleviated pathology resulting from accrual of cytosolic DNA in Trex-1 mutant mice.

BB-Cl-Amidine inhibited STING oligomerization through modification of Cys148.

## References

