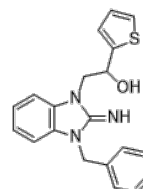


Product Name : BRD0539
Cat. No. : PC-23746
CAS No. : 1403838-79-8
Molecular Formula : C₂₅H₂₅N₂O₃S
Molecular Weight : 452.54
Target : CRISPR/Cas9
Solubility : 10 mM in DMSO



CAS: 292613-04-8

Biological Activity

BRD0539 is a cell-permeable, reversible inhibitor of Streptococcus pyogenes Cas9 (SpCas9) with IC₅₀ of 22 μM in vitro DNA cleavage assays, effectively inhibits the DNA-binding ability of SpCas9 by disrupting the interaction between SpCas9 and the protospacer adjacent motif (PAM).

BRD0539 has shown low toxicity in eukaryotic cells and is expected to resolve several issues associated with the use of CRISPR-Cas in bacteria.

References

Zhang N, et al. J Chem Inf Model. 2023 Jun 12;63(11):3500-3509.

Tamaki M, et al. Biosci Microbiota Food Health. 2025;44(1):70-79.

Basudeb Maji, et al. Cell. 2019 May 2;177(4):1067-1079.e19.

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

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