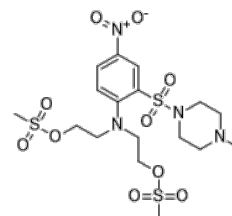


Product Name : ACHM-025
Cat. No. : PC-23372
CAS No. : 2377718-85-7
Molecular Formula : C₁₇H₂₈N₄O₁₀S₃
Molecular Weight : 544.61
Target : DNA Alkylator/Crosslinker
Solubility : 10 mM in DMSO



CAS: 2377718-85-7

Biological Activity

ACHM-025 is a third generation **AKR1C3**-activated prodrug, selectively activates by AKR1C3 in the presence of NADPH to form the nitrogen mustard **DNA alkylating agent**.

ACHM-025 shows a strong and significant correlation with basal AKR1C3 protein expression, shows selectivity for activation by the AKR1C3 isoform, compared to AKR1C1, AKR1C2 and AKR1C4 in HCT116 cells.

ACHM-025 has potent in vivo efficacy against T-ALL patient-derived xenografts (PDXs) and eradicated the disease in 7 PDXs.

ACHM-025 was significantly more effective than cyclophosphamide both as a single agent and when used in combination with cytarabine/6-mercaptopurine.

ACHM-025 ex vivo cytotoxicity shows a significant inverse correlation with AKR1C3 mRNA expression.

References

Toscan CE, et al. *Blood Cancer J.* 2024 Nov 6;14(1):192.

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

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