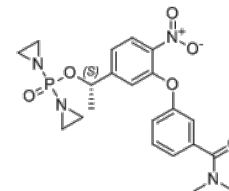


Product Name : AST-3424 (S-isomer)
Cat. No. : PC-38759
CAS No. : 2097713-69-2
Molecular Formula : C₂₁H₂₅N₄O₆P
Molecular Weight : 460.427
Target : DNA Alkylator/Crosslinker
Solubility : 10 mM in DMSO



Biological Activity

OBI-3424 S-isomer (TH-3424, OBI 3424) is a highly potent DNA alkylating prodrug that is converted by AKR1C3 to a potent DNA-alkylating agent.

OBI-3424 exerted potent cytotoxicity against the H460 lung cancer cell line (IC₅₀ 4.0 nM), and potent cytotoxicity, in particular against cell lines derived from T-ALL with high AKR1C3 expression, with IC₅₀ values in the low nM range.

OBI-3424 shows potential anti-leukemic activity against a panel of 19 PDXs representative of B-ALL, T-ALL and ETP-ALL (median IC₅₀=60.3 nM).

OBI-3424 exerted profound in vivo efficacy against T-ALL PDXs, OBI-3424 combined with nelarabine resulted in prolongation of mouse EFS compared with each single agent alone.

References

Richard B. Lock, et al. Abstract LB-B16: The AKR1C3-Activated Prodrug OBI-3424 Exerts Profound In Vivo Efficacy Against Preclinical Models of T-Cell Acute Lymphoblastic Leukemia (T-ALL); a Pediatric Preclinical Testing Consortium Study. AACR 2018.

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

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