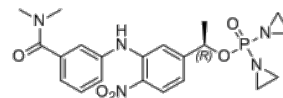


**Product Name** : OBI-3424  
**Cat. No.** : PC-35531  
**CAS No.** : 2097713-68-1  
**Molecular Formula** : C<sub>21</sub>H<sub>25</sub>N<sub>4</sub>O<sub>6</sub>P  
**Molecular Weight** : 460.427  
**Target** : DNA Alkylator/Crosslinker  
**Solubility** : 10 mM in DMSO



## Biological Activity

OBI-3424 (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 (IC<sub>50</sub> 4.0 nM), and potent cytotoxicity, in particular against cell lines derived from T-ALL with high AKR1C3 expression, with IC<sub>50</sub> 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 IC<sub>50</sub>=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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