

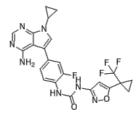
## **Data Sheet**

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Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name : Ofirnoflast
Cat. No. : PC-25235
CAS No. : 2731294-23-6
Molecular Formula : C<sub>23</sub>H<sub>19</sub>F<sub>4</sub>N<sub>7</sub>O<sub>2</sub>
Molecular Weight : 501.45

Target : Other Targets
Solubility : 10 mM in DMSO



CAS: 2731294-23-6

## **Biological Activity**

Ofirnoflast (HT-6184) is first-in-class, allosteric and orally bioavailable NEK7 inhibitor that disrupts NEK7-NLRP3 protein interaction, thereby preventing the formation of the NLRP3 inflammasome.

Ofirnoflast (HT-6184) dose-dependently suppresses ASC specks, IL-1 $\beta$  release, and pyroptotic cell death in THP-1 macrophages and human iPSC-derived microglia.

Ofirnoflast (HT-6184) stabilizes NEK7 in a unique conformation.

Ofirnoflast (HT-6184) engages a conserved allosteric site adjacent to NEK7's ATP-binding pocket, inducing conformational shifts that impair its scaffolding function.

Ofirnoflast (HT-6184) significantly reduces cytokine levels and improves clinical and histopathological outcomes in DSS-induced colitis model.

## References

Alexis Mollard, et al. J Drug Target. 2025 Aug 3:1-15. doi: 10.1080/1061186X.2025.2542856.

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

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