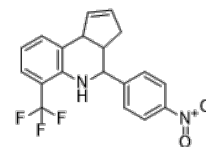


Product Name : iBFAR2
Cat. No. : PC-23528
CAS No. : 353484-02-3
Molecular Formula : C₁₉H₁₅F₃N₂O₂
Molecular Weight : 360.34
Target : E3 Ubiquitin Ligase
Solubility : 10 mM in DMSO



CAS: 353484-02-3

Biological Activity

iBFAR2 is a specific small molecule inhibitor of **ubiquitin E3 ligase** bifunctional apoptosis regulator (**BFAR**), inhibits USP39 ubiquitination and JAK2 deubiquitination, promoting STAT1 phosphorylation and tissue resident memory T cells (TRM) differentiation, boosts antitumor immunity in aged mice.

iBFAR2 rescued the antitumor activity of aged CD8⁺ T cells by restoring tissue resident memory T (TRM) generation in the tumor microenvironment.

iBFAR2 efficiently inhibited tumor growth in aged CD8⁺ T cell transfer and anti-programmed cell death protein 1 (PD-1)-resistant mouse tumor models.

The E3 ligase BFAR suppressed cytokine-induced JAK2 signaling by activating JAK2 deubiquitination through the deubiquitinase USP39, thereby limiting downstream STAT1-mediated TRM reprogramming.

References

Pei S, et al. *Nat Aging*. 2024 Nov 26. doi: 10.1038/s43587-024-00746-5.

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

E-mail: tech@probechem.com