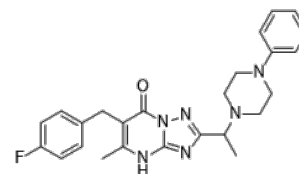


Product Name : BPRPT0245
Cat. No. : PC-24307
CAS No. : 2982603-10-9
Molecular Formula : C₂₅H₂₇FN₆O
Molecular Weight : 446.53
Target : Other Targets
Solubility : 10 mM in DMSO



CAS: 2982603-10-9

Biological Activity

BPRPT0245 is a specific small-molecule inhibitor of prostaglandin reductase 2 (**PTGR2**) with IC₅₀ of 8.92 nM, restores 15-keto-PGE₂-dependent PPAR γ trans-activation in HEK293T cells expressing recombinant PTGR2 with EC₅₀ of 49.22 nM. BPRPT0245 not only increased intracellular 15-keto-PGE₂ concentrations in a dose-dependent manner but also augmented insulin-stimulated glucose uptake of differentiated 3T3-L1 adipocytes. BPRPT0245 interferes with the interaction between 15-keto-PGE₂ and NADPH within the catalytic site of hPTGR2. BPRPT0245 protected mice from diet-induced obesity, insulin resistance, glucose intolerance, and fatty liver without fluid retention and reduced bone density.

References

Chang YC, et al. *EMBO Mol Med*. 2025 Mar 21. doi: 10.1038/s44321-025-00216-4.

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

E-mail: tech@probechem.com