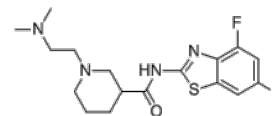


Product Name : MCUF-651
Cat. No. : PC-72557
CAS No. : 2747162-85-0
Molecular Formula : C₁₇H₂₂F₂N₄OS
Molecular Weight : 368.447
Target : Guanylate Cyclase
Solubility :



Biological Activity

MCUF-651 (MCUF651) is a small molecule **guanylyl cyclase A receptor (GC-A)** positive allosteric modulator (PAM), potentiate ANP-mediated cGMP with EC₅₀ of 0.45 μM (E_{max}=82%) in HEK293 GC-A cells.

MCUF-651 enhanced ANP-mediated cGMP generation in human cardiac, renal, and fat cells and inhibited cardiomyocyte hypertrophy in vitro.

MCUF-651 binds to GC-A (K_d=397 nM) and selectively enhances the binding of ANP to GC-A (MCUF-651+ANP, K_d=0.06 nM).

MCUF-651 is orally bioavailable in mice and enhances the ability of endogenous ANP and BNP to generate GC-A-mediated cGMP ex vivo.

References

S Jeson Sangaralingham, et al. *Proc Natl Acad Sci U S A*. 2021 Dec 28;118(52):e2109386118.

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

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