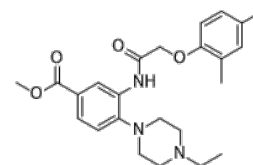


Product Name : AP503
Cat. No. : PC-24037
CAS No. : 767299-99-0
Molecular Formula : C₂₄H₃₁N₃O₄
Molecular Weight : 425.53
Target : Androgen Receptor (AR)
Solubility : 10 mM in DMSO



CAS: 767299-99-0

Biological Activity

AP503 (AP-970/43482503) is a potent, specific small molecule agonist of androgen membrane receptor

GPR133 (ADGRD1) with EC₅₀ of 1.21 nM.

AP503 activates the Gs but not the G12 or Gi pathway of GPR133.

AP503 shows no detectable activity for AR or other aGPCR members.

AP503 enhances muscle strength without eliciting androgenic adverse effects, significantly promotes the tetanic contraction forces of isolated EDLs through PKA-mediated signaling.

GPR133 represents an androgen membrane receptor that contributes to normal androgen physiology and has important therapeutic potentials.

References

Yang Z, et al. *Cell*. 2025 Jan 23:S0092-8674(25)00035-2.

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

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