MedChemExpress

FSHR agonist 1


## SOLVENT \& SOLUBILITY

In Vitro
DMSO : $50 \mathrm{mg} / \mathrm{mL}$ (106.92 mM; Need ultrasonic)

|  | Solvent Mass |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Concentration | 1 mg | 5 mg | 10 mg |  |
| Preparing |  |  |  |  |
| Stock Solutions | 1 mM | 2.1385 mL | 10.6924 mL | 21.3849 mL |
|  | 5 mM | 0.4277 mL | 2.1385 mL | 4.2770 mL |
|  | 10 mM | 0.2138 mL | 1.0692 mL | 2.1385 mL |

Please refer to the solubility information to select the appropriate solvent.

## BIOLOGICAL ACTIVITY

Description
$\mathrm{IC}_{50}$ \& Target

In Vitro

FSHR agonist 1 is a high affinity and allosteric follicle stimulating hormone receptor (FSHR) agonist with a pEC 50 of 7.72 . FSHR agonist 1 formes extensive interactions with the TMD to directly activate $\mathrm{FSHR}^{[1]}$.

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pEC50: 7.72 (FSHR) }\mp@subsup{}{}{[1]
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The binding of FSHR agonist 1 (compound 21f) to the FSHR TMD pocket induces inward movements of TM6 and TM7, which directly results in FSHR activation ${ }^{[1]}$.

FSHR agonist 1 (compound 21f) can activate FSHR, LHCGR and TSHR with highly potency and efficacy, while the activation potency for FSHR is more than 10 -fold higher than LHCGR ( $\mathrm{pEC} \mathrm{C}_{50}$ of 6.26) and TSHR ( $\mathrm{pEC} \mathrm{C}_{50}$ of 6.48) ${ }^{[1]}$.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## REFERENCES

[1]. Jia Duan, et al. Universal mechanism of hormone and allosteric agonist mediated activation of glycoprotein hormone receptors as revealed by structures of follicle stimulating hormone receptor. biorxiv. August 01, 2022.

## Caution: Product has not been fully validated for medical applications. For research use only.

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