# CCG273441

**Cat. No.:** HY-47573

**CAS No.:** 2750414-35-6

**Molecular Formula:** $C_{26}H_{24}ClFN_4O_3$

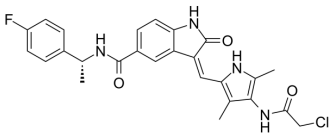
**Molecular Weight:** 494.95

**Target:** G Protein-coupled Receptor Kinase (GRK)

**Pathway:** GPCR/G Protein

**Storage:**

| | | |
|---|---|---|
| Powder | -20°C | 3 years |
| | 4°C | 2 years |
| In solvent | -80°C | 6 months |
| | -20°C | 1 month |



## SOLVENT & SOLUBILITY

**In Vitro**

DMSO : 50 mg/mL (101.02 mM; Need ultrasonic)

| Preparing Stock Solutions | Solvent / Mass / Concentration | 1 mg | 5 mg | 10 mg |
|---|---|---|---|---|
| | 1 mM | 2.0204 mL | 10.1020 mL | 20.2041 mL |
| | 5 mM | 0.4041 mL | 2.0204 mL | 4.0408 mL |
| | 10 mM | 0.2020 mL | 1.0102 mL | 2.0204 mL |

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

## BIOLOGICAL ACTIVITY

**Description**

CCG273441 is a covalent inhibitor of G protein-coupled receptor (GPCR) kinase 5 (GRK5) with an $IC_{50}$ value of 3.8 nM. CCG273441 is highly selective to GRK5 over GRK2 ($IC_{50}$=4.8 μM) by binding Cys474, a GRK5 subfamily-specific residue, as a covalent handle[1].

**$IC_{50}$ & Target**

IC50: 3.8 nM (human GRK5), 19 nM (GRK5-C474S), 4.8 μM (bovine GRK2)[1]

**In Vitro**

Human GRKs (GRK1−GRK7) are classified into three subfamilies: GRK1 (GRK1 and GRK7), GRK2 (GRK2 and GRK3), and GRK4 (GRK4, GRK5, and GRK6)[1].

CCG273441 (compound 9j) shows moderate potency (GRK5 $IC_{50}$=3.8 nM) but 1000-fold selectivity over GRK2 ($IC_{50}$=4.8 μM)[1].

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

## REFERENCES

[1]. Rowlands RA, et al. Generation of Highly Selective, Potent, and Covalent G Protein-Coupled Receptor Kinase 5 Inhibitors. J Med Chem. 2021 Jan 14;64(1):566-585.



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