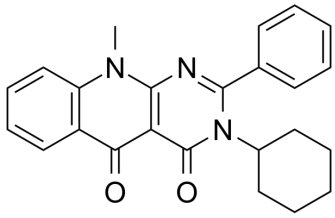
# SRI-37240

| | |
|---|---|
| **Cat. No.:** | HY-150089 |
| **CAS No.:** | 883956-47-6 |
| **Molecular Formula:** | $C_{24}H_{23}N_3O_2$ |
| **Molecular Weight:** | 385.46 |
| **Target:** | CFTR |
| **Pathway:** | Membrane Transporter/Ion Channel |
| **Storage:** | Powder -20°C 3 years<br>4°C 2 years<br>In solvent -80°C 6 months<br>-20°C 1 month |



## SOLVENT & SOLUBILITY

**In Vitro**

DMSO : 11.36 mg/mL (29.47 mM; ultrasonic and warming and heat to 60°C)

| Preparing Stock Solutions | Solvent / Mass / Concentration | 1 mg | 5 mg | 10 mg |
|---|---|---|---|---|
| | 1 mM | 2.5943 mL | 12.9715 mL | 25.9430 mL |
| | 5 mM | 0.5189 mL | 2.5943 mL | 5.1886 mL |
| | 10 mM | 0.2594 mL | 1.2972 mL | 2.5943 mL |

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

## BIOLOGICAL ACTIVITY

**Description**

SRI-37240 is a potent premature termination codons (PTCs) inhibitor. SRI-37240 suppresses CFTR nonsense mutations. SRI-37240 alters cellular translation termination at PTCs in HEK293T cells. SRI-37240 can also restore CFTR function in primary bronchial epithelial cells when combination with G418[1].

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

Premature termination codons, CFTR[1]

**In Vitro**

SRI-37240 (1, 3, 10 and 30 μM; 48 h) induces concentration-dependent increases in CFTR-dependent (Forskolin-stimulated and sensitive to the inhibitor $CFTR_{Inh}$-172) chloride conductance[1].

SRI-37240 (10 μM; 72 h) significantly increases the amount of full-length, fully glycosylated form of CFTR protein, and the unprocessed, immature form of full-length CFTR protein in 16HBEge cells when co-treated with G418 (100 μM)[1].

SRI-37240 (10 μM; 24 h) alters cellular translation termination at PTCs in HEK293T cells, also increases global densities of ribosomes at normal stop codons without affecting densities of ribosomes in 3-UTRs[1].

SRI-37240 (10 μM; 72 h) restores CFTR function in primary bronchial epithelial cells when combination with G418[1].

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

Western Blot Analysis[1]

| | |
|---|---|
| Cell Line: | CFTR-G542X 16HBEge |
| Concentration: | 10 μM |
| Incubation Time: | 24 h |
| Result: | Significantly increased the amount of Band C CFTR protein, which represents the full-length, fully glycosylated form of CFTR and Band B, which represents the unprocessed, immature form of full-length CFTR protein when combined with G418 (100 μM). |

## REFERENCES

[1]. Sharma J, et al. A small molecule that induces translational readthrough of CFTR nonsense mutations by eRF1 depletion. Nat Commun. 2021 Jul 16;12(1):4358.



Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA