(1)

MedChemExpress

## Product Data Sheet

CO23

| Cat. No.: | HY-130012 |  |  |
| :---: | :---: | :---: | :---: |
| CAS No.: | 1370363-74-8 |  |  |
| Molecular Formula: | $\mathrm{C}_{19} \mathrm{H}_{18} \mathrm{I}_{2} \mathrm{~N}_{2} \mathrm{O}_{4}$ |  |  |
| Molecular Weight: | 592.17 |  |  |
| Target: | Thyroid Hormone Receptor |  |  |
| Pathway: | Others |  |  |
| Storage: | Powder | $-20^{\circ} \mathrm{C}$ | 3 years |
|  |  | $4^{\circ} \mathrm{C}$ | 2 years |
|  | In solvent | $-80^{\circ} \mathrm{C}$ | 6 months |
|  |  | $-20^{\circ} \mathrm{C}$ | 1 month |



## SOLVENT \& SOLUBILITY

In Vitro
DMSO : $250 \mathrm{mg} / \mathrm{mL}$ (422.18 mM; Need ultrasonic)

|  | Solvent Mass |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Concentration | 1 mg | 5 mg | 10 mg |  |
| Preparing |  |  |  |  |
| Stock Solutions | 1 mM | 1.6887 mL | 8.4435 mL | 16.8870 mL |
|  | 5 mM | 0.3377 mL | 1.6887 mL | 3.3774 mL |
|  | 10 mM | 0.1689 mL | 0.8444 mL | 1.6887 mL |

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

## BIOLOGICAL ACTIVITY

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

In Vivo

CO23 is a selective thyroid hormone receptor (TR) a agonist and used for growth and development regulation. CO23 was able to be transported through the blood-brain barrier ${ }^{[1]}$.
$T R a^{[1]}$

CO23 (ip; 0.04-5.0 nmol$/ \mathrm{g}$ ) has $\approx 50 \%$ cholesterol reduction with $0.8 \mathrm{nmol} / \mathrm{g}$ dose and higher doses are equally effective. CO23 has no effect at the lowest dose of $0.04 \mathrm{nmol} / \mathrm{g}$ and increases Dio1 mRNA 5-, 10 -, and 15 -fold at the doses of $0.8,2.5$, and 5 nmol/g, respectively ${ }^{[1]}$

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

| Animal Model: | Hypothyroid Wistar rats |
| :--- | :--- |
| [1] |  |
| Dosage: | $0.04,0.8,2.5$, and $5.0 \mathrm{nmol} / \mathrm{g}$ |


|  | Ip |
| :--- | :--- | :--- |
|  | Had $\approx 50 \%$ cholesterol reduction with $0.8 \mathrm{nmol} / \mathrm{g}$ dose and higher doses were equally <br> effective. |
| Result: |  |

## REFERENCES

[1]. Grijota-Martínez C, et al. In vivo activity of the thyroid hormone receptor beta- and a-selective agonists GC-24 and CO23on rat liver, heart, and brain. Endocrinology. 2011 Mar;152(3):1136-42.

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

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