Metolazone-d ${ }_{7}$

| Cat. No.: | HY-B0209S |  |  |
| :---: | :---: | :---: | :---: |
| CAS No.: | 2714484-71-4 |  |  |
| Molecular Formula: | $\mathrm{C}_{16} \mathrm{H}_{9} \mathrm{D}_{7} \mathrm{ClN}_{3} \mathrm{O}_{3} \mathrm{~S}$ |  |  |
| Molecular Weight: | 372.88 |  |  |
| Target: | Thrombin |  |  |
| Pathway: | Metabolic Enzyme/Protease |  |  |
| 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

$$
\begin{array}{ll}
\text { In Vitro } & \text { DMSO }: \geq 100 \mathrm{mg} / \mathrm{mL}(268.18 \mathrm{mM}) \\
& \mathrm{H} 2 \mathrm{O}: 0.67 \mathrm{mg} / \mathrm{mL}(1.80 \mathrm{mM} \text {; Need ultrasonic) } \\
& { }^{\prime \prime} \geq \text { " means soluble, but saturation unknown. }
\end{array}
$$

|  | Solvent Mass |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Concentration | 1 mg | 5 mg | 10 mg |  |
| Preparing |  |  |  |  |
| Stock Solutions | 1 mM | 2.6818 mL | 13.4091 mL | 26.8183 mL |
|  | 5 mM | 0.5364 mL | 2.6818 mL | 5.3637 mL |
|  | 10 mM | 0.2682 mL | 1.3409 mL | 2.6818 mL |

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

## BIOLOGICAL ACTIVITY

## Description

In Vitro

Metolazone- $d_{7}$ is deuterium labeled Metolazone. Metolazone (SR-720-22) is primarily used to treat congestive heart failure and high blood pressure.

Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs ${ }^{[1]}$.
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## REFERENCES

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216
[2]. Stern A. Metolazone, a diuretic agent. Am Heart J. 1976 Feb;91(2):262-3.
[3]. Thompson DM. A new antihypertensive: metolazone treatment of hypertension. J Kans Med Soc. 1977 Jul;78(7):337-9, 342.

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

[^0]
[^0]:    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

