(a)

MedChemExpress

## Product Data Sheet

## 1-Hexadecanol-d 5

| Cat. No.: | HY-B1465S2 |  |  |
| :---: | :---: | :---: | :---: |
| CAS No.: | 1219799-18-4 |  |  |
| Molecular Formula: | $\mathrm{C}_{16} \mathrm{H}_{29} \mathrm{D}_{5} \mathrm{O}$ |  |  |
| Molecular Weight: | 247.47 |  |  |
| Target: | Endogenous Metabolite |  |  |
| 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

In Vitro DMSO : 50 mg/mL (202.04 mM; Need ultrasonic)

|  | Solvent Mass |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Concentration | 1 mg | 5 mg | 10 mg |  |
| Preparing |  |  |  |  |
| Stock Solutions | 1 mM | 4.0409 mL | 20.2045 mL | 40.4089 mL |
|  | 5 mM | 0.8082 mL | 4.0409 mL | 8.0818 mL |
|  | 10 mM | 0.4041 mL | 2.0204 mL | 4.0409 mL |

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

In Vivo 1. Add each solvent one by one: $10 \%$ DMSO >> 90\% corn oil Solubility: $\geq 1.25 \mathrm{mg} / \mathrm{mL}(5.05 \mathrm{mM})$; Clear solution

## BIOLOGICAL ACTIVITY

| Description | 1-Hexadecanol- $d_{5}$ is the deuterium labeled 1-Hexadecanol[1]. 1-Hexadecanol is a fatty alcohol, a lipophilic substrate[2]. |
| :--- | :--- |
| In Vitro | Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as <br> tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to <br> affect the pharmacokinetic and metabolic profiles of drugs $[1]$. <br> 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 Feb;53(2):211-216.

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

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