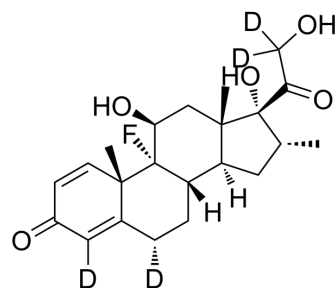


## Dexamethasone-4,6 $\alpha$ ,21,21-d<sub>4</sub>

<b>Cat. No.:</b>	HY-14648S3
<b>CAS No.:</b>	2483831-63-4
<b>Molecular Formula:</b>	C <sub>22</sub> H <sub>25</sub> D <sub>4</sub> FO <sub>5</sub>
<b>Molecular Weight:</b>	396.49
<b>Target:</b>	Glucocorticoid Receptor; Bacterial; Autophagy; SARS-CoV; Complement System; Mitophagy; Antibiotic; Isotope-Labeled Compounds
<b>Pathway:</b>	Immunology/Inflammation; Vitamin D Related/Nuclear Receptor; Anti-infection; Autophagy; Others
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

#### Description

Dexamethasone-4,6 $\alpha$ ,21,21-d<sub>4</sub> is the deuterium labeled Dexamethasone-4,6 $\alpha$ ,21,21. Dexamethasone (Hexadecadrol) is a glucocorticoid receptor agonist. Dexamethasone also significantly decreases CD11b, CD18, and CD62L expression on neutrophils, and CD11b and CD18 expression on monocytes. Dexamethasone is highly effective in the control of COVID-19 infection. Dexamethasone inhibits production of exosomes containing inflammatory microRNA-155 in lipopolysaccharide-induced macrophage inflammatory responses.

#### In Vitro

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<sup>[1]</sup>. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

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

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