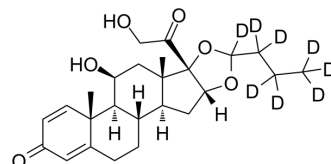


Budesonide-d₈

Cat. No.:	HY-13580S
CAS No.:	1105542-94-6
Molecular Formula:	C ₂₅ H ₂₆ D ₈ O ₆
Molecular Weight:	438.58
Target:	Glucocorticoid Receptor
Pathway:	Immunology/Inflammation; Vitamin D Related/Nuclear Receptor
Storage:	-20°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



BIOLOGICAL ACTIVITY

Description	Budesonide-d ₈ is the deuterium labeled Budesonide. Budesonide, an inhaled glucocorticoid steroid, is an orally active glucocorticoid receptor agonist. Budesonide decreases the size of lung tumors, reverses DNA hypomethylation and modulates mRNA expression of genes. Budesonide is an anti-inflammatory agent used for asthma[1][2][3].
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 ^[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]. Claudia Grossmann, et al. Transactivation via the Human Glucocorticoid and Mineralocorticoid Receptor by Therapeutically Used Steroids in CV-1 Cells: A Comparison of Their Glucocorticoid and Mineralocorticoid Properties. *Eur J Endocrinol.* 2004 Sep;151(3):

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

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