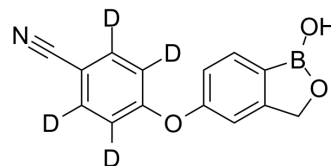


## Crisaborole-d4

Cat. No.:	HY-10978S
Molecular Formula:	C <sub>14</sub> H <sub>6</sub> D <sub>4</sub> BNO <sub>3</sub>
Molecular Weight:	255.07
Target:	Phosphodiesterase (PDE)
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Crisaborole-d4 is deuterium labeled Crisaborole. Crisaborole (AN-2728) is a potent inhibitor of PDE4 and cytokine release; inhibit PDE4 with an IC50 of 0.49 μM.
<b>In Vitro</b>	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

- [1]. Akama T, et al. Discovery and structure-activity study of a novel benzoxaborole anti-inflammatory agent (AN2728) for the potential topical treatment of psoriasis and atopic dermatitis. *Bioorg Med Chem Lett*. 2009 Apr 15;19(8):2129-32.
- [2]. Nazarian R, et al. AN-2728, a PDE4 inhibitor for the potential topical treatment of psoriasis and atopic dermatitis. *Curr Opin Investig Drugs*. 2009 Nov;10(11):1236-42.
- [3]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother*. 2019;53(2):211-216.

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

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