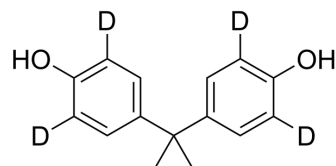


## Bisphenol A-d<sub>4</sub>-1

Cat. No.:	HY-18260S5
CAS No.:	347841-41-2
Molecular Formula:	C <sub>15</sub> H <sub>12</sub> D <sub>4</sub> O <sub>2</sub>
Molecular Weight:	232.31
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Bisphenol A-d <sub>4</sub> -1 is the deuterium labeled Bisphenol A[1]. Bisphenol A is a phenolic, organic synthetic compound widely used in the production of polycarbonate plastics and epoxy resins. Bisphenol A is a reproductive, developmental, and systemic toxicant, often classified as an endocrine-disrupting compound (EDC). Bisphenol A is associated with many diseases, including cardiovascular diseases, respiratory diseases, diabetes, kidney diseases, obesity, and reproductive disorders[2][3].
<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]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother*. 2019 Feb;53(2):211-216.
- [2]. Huang M, et al. Bisphenol A and its analogues bisphenol S, bisphenol F and bisphenol AF induce oxidative stress and biomacromolecular damage in human granulosa KGN cells. *Chemosphere*. 2020 Apr 9;253:126707.
- [3]. Rubin BS, et al. Bisphenol A: an endocrine disruptor with widespread exposure and multiple effects. *J Steroid Biochem Mol Biol*. 2011 Oct;127(1-2):27-34.

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

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