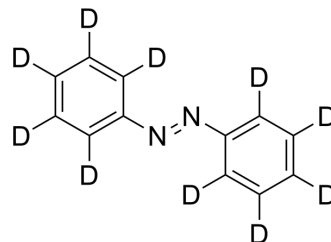


## Azobenzene-d<sub>10</sub>

|                    |   |
|--------------------|---|
| Cat. No.:          | HY-B2127S   |
| CAS No.:           | 30504-49-5  |
| Molecular Formula: | C <sub>12</sub> D <sub>10</sub> N <sub>2</sub>  |
| Molecular Weight:  | 192.28  |
| Target:            | Isotope-Labeled Compounds   |
| Pathway:           | Others  |
| Storage:           | Please store the product under the recommended conditions in the Certificate of Analysis. |



### BIOLOGICAL ACTIVITY

|             |  |
|-------------|--|
| Description | Azobenzene-d <sub>10</sub> is the deuterium labeled Azobenzene[1]. Azobenzene can be used as an optical trigger for the design and synthesis of a large variety of photoresponsive systems[2][3][4].   |
| 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> .<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.
- [2]. Aemissegger A, et al. Synthesis and application of an azobenzene amino acid as a light-switchable turn element in polypeptides. *Nat Protoc*. 2007;2(1):161-7.
- [3]. Renner C, et al. Azobenzene as photoresponsive conformational switch in cyclic peptides. *J Pept Res*. 2005 Jan65(1):4-14.
- [4]. Beharry AA, et al. Azobenzene photoswitches for biomolecules. *Chem Soc Rev*. 2011 Aug40(8):4422-37.

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

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