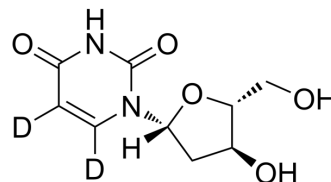


## 2'-Deoxyuridine-d<sub>2</sub>-1

|                    |   |
|--------------------|---|
| Cat. No.:          | HY-D0186S8  |
| CAS No.:           | 40632-23-3  |
| Molecular Formula: | C <sub>9</sub> H <sub>10</sub> D <sub>2</sub> N <sub>2</sub> O <sub>5</sub>               |
| Molecular Weight:  | 230.21  |
| 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> | 2'-Deoxyuridine-d <sub>2</sub> -1 is the deuterium labeled 2'-Deoxyuridine[1]. 2'-Deoxyuridine could increase chromosome breakage and results in a decreased thymidylate synthetase activity. A known use of 2'-Deoxyuridine is as a precursor in the synthesis of Edoxudine[2].   |
| <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> .<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]. Reidy JA, et al. Deoxyuridine increases folate-sensitive fragile site expression in human lymphocytes. *Am J Med Genet*. 1987 Jan;26(1):1-5.

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

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