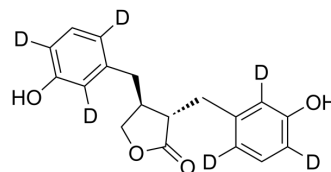


## Enterolactone-d<sub>6</sub>

|                           |   |
|---------------------------|---|
| <b>Cat. No.:</b>          | HY-108692S  |
| <b>CAS No.:</b>           | 104411-11-2   |
| <b>Molecular Formula:</b> | C <sub>18</sub> H <sub>12</sub> D <sub>6</sub> O <sub>4</sub>                             |
| <b>Molecular Weight:</b>  | 304.37  |
| <b>Target:</b>            | Apoptosis; Endogenous Metabolite; Isotope-Labeled Compounds                               |
| <b>Pathway:</b>           | Apoptosis; Metabolic Enzyme/Protease; Others  |
| <b>Storage:</b>           | Please store the product under the recommended conditions in the Certificate of Analysis. |



### BIOLOGICAL ACTIVITY

|                    |  |
|--------------------|--|
| <b>Description</b> | Enterolactone-d <sub>6</sub> is the deuterium labeled Enterolactone. Enterolactone is a bioactive phenolic metabolite known as a mammalian lignan derived from dietary lignans. Enterolactone has estrogenic properties and anti-breast cancer activity[1]. Enterolactone is a radiosensitizer for human breast cancer cell lines through impaired DNA repair and increased apoptosis[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;53(2):211-216.
- [2]. Bigdeli B, et al. Enterolactone: A novel radiosensitizer for human breast cancer cell lines through impaired DNA repair and increased apoptosis. *Toxicol Appl Pharmacol.* 2016;313:180-194.
- [3]. Mali AV, et al. Enterolactone modulates the ERK/NF-κB/Snail signaling pathway in triple-negative breast cancer cell line MDA-MB-231 to revert the TGF-β-induced epithelial-mesenchymal transition. *Cancer Biol Med.* 2018;15(2):137-156.

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

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