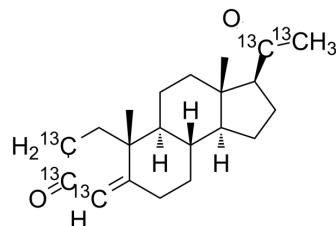


## Progesterone-<sup>13</sup>C<sub>5</sub>

<b>Cat. No.:</b>	HY-N0437S1
<b>CAS No.:</b>	2687960-32-1
<b>Molecular Formula:</b>	C <sub>16</sub> <sup>13</sup> C <sub>5</sub> H <sub>30</sub> O <sub>2</sub>
<b>Molecular Weight:</b>	319.42
<b>Target:</b>	Progesterone Receptor; Endogenous Metabolite; Isotope-Labeled Compounds
<b>Pathway:</b>	Vitamin D Related/Nuclear Receptor; 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>	Progesterone- <sup>13</sup> C <sub>5</sub> is the <sup>13</sup> C-labeled Progesterone. Progesterone is a steroid hormone that regulates the menstrual cycle and is crucial for pregnancy.
<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;53(2):211-216.
- [2]. Schindler AE, et al. Classification and pharmacology of progestins. *Maturitas*. 2003 Dec 10;46 Suppl 1:S7-S16.
- [3]. Zava DT, et al. Estrogen and progestin bioactivity of foods, herbs, and spices. *Proc Soc Exp Biol Med*. 1998 Mar;217(3):369-78.
- [4]. Komesaroff PA, et al. Effects of wild yam extract on menopausal symptoms, lipids and sex hormones in healthy menopausal women. *Climacteric*. 2001 Jun;4(2):144-50.
- [5]. Girling JE, et al. Progesterone, but not estrogen, stimulates vessel maturation in the mouse endometrium. *Endocrinology*. 2007 Nov;148(11):5433-41. Epub 2007 Aug 9.

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

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