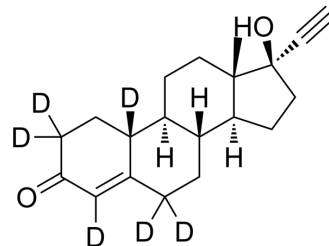


## Norethindrone-d<sub>6</sub>

<b>Cat. No.:</b>	HY-B0554S
<b>CAS No.:</b>	2376036-05-2
<b>Molecular Formula:</b>	C <sub>20</sub> H <sub>20</sub> D <sub>6</sub> O <sub>2</sub>
<b>Molecular Weight:</b>	304.46
<b>Target:</b>	Progesterone Receptor; Isotope-Labeled Compounds
<b>Pathway:</b>	Vitamin D Related/Nuclear Receptor; Others
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	<p>Norethindrone-d<sub>6</sub> is the deuterium labeled Norethindrone. Norethindrone is a female progestin approved by FDA for the treatment of endometriosis, uterine bleeding caused by abnormal hormone levels, and secondary amenorrhea.</p> <p>Norethindrone-d<sub>6</sub> is a click chemistry reagent, it contains an Alkyne group and can undergo copper-catalyzed azide-alkyne cycloaddition (CuAAC) with molecules containing Azide groups.</p>
<b>In Vitro</b>	<p>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>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

### REFERENCES

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216.
- [2]. Cheng DC, et al. Norethindrone acetate inhibition of triglyceride synthesis and release by rat hepatocytes. *Atherosclerosis.* 1983 Jan;46(1):41-8.
- [3]. Kaser DJ, et al. Use of norethindrone acetate alone for postoperative suppression of endometriosis symptoms. *J Pediatr Adolesc Gynecol.* 2012 Apr;25(2):105-8.
- [4]. Maier WE, et al. Pharmacology and toxicology of ethinyl estradiol and norethindrone acetate in experimental animals. *Regul Toxicol Pharmacol.* 2001 Aug;34(1):53-61.
- [5]. Muneyyirci-Delale O, et al. Effect of norethindrone acetate in the treatment of symptomatic endometriosis. *Int J Fertil Womens Med.* 1998 Jan-Feb;43(1):24-7.

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

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