

## Product Information

**Product ID** T3305  
**CAS No.** 5630-53-5  
**Chemical Name** (7 $\alpha$ ,17 $\alpha$ )-17-Hydroxy-7-methyl-19-norpregn-5(10)-en-20-yn-3-one

**Synonym** Org-OD-14, Livial

**Formula** C<sub>21</sub>H<sub>28</sub>O<sub>2</sub>

**Formula Wt.** 312.45

**Melting Point** 163-169 °C

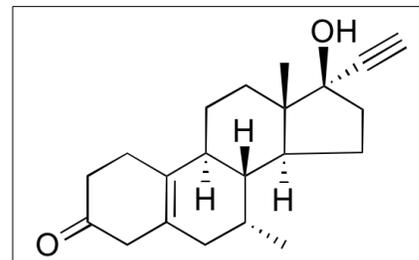
**Purity** ≥98%

**Solubility** Soluble in ethanol, DMSO, and DMF.

**Store Temp** Ambient

**Ship Temp** Ambient

**Description** Tibolone is a synthetic steroid hormone selective estrogen receptor modulator (SERM) that acts as an agonist or antagonist depending on the tissue location. Tibolone exhibits anti-osteoporotic, vasodilatory, and anti-metastatic activities. Tibolone has estrogenic and androgenic activity and is used for hormone replacement therapy, preventing bone loss in postmenopausal women; it acts as an agonist at progesterone and androgen receptors. Tibolone and its various metabolites act on many enzymes; they inhibit STS, 17 $\beta$ -HSD1, and aromatase, and activate steroid sulfotransferase and 17 $\beta$ -HSD2. Tibolone produces vascular relaxation in coronary arteries as well. Additionally, this compound inhibits mammary carcinoma cell invasion, likely by decreasing activity of MMP9. Tibolone is an antagonist at mineralocorticoid and glucocorticoid receptors.



**Bulk quantities available upon request**

Product ID	Size
T3305	25 mg
T3305	100 mg
T3305	500 mg
T3305	1 g

**References** Campisi R, Marengo FD. Cardiovascular effects of tibolone: a selective tissue estrogenic activity regulator. *Cardiovasc Drug Rev.* 2007 Summer;25(2):132-45. PMID: 17614936.

Raobaikady B, Parsons MF, Reed MJ, et al. Tibolone and its delta-4, 7 $\alpha$ -methyl norethisterone metabolite are reversible inhibitors of human aromatase. *J Steroid Biochem Mol Biol.* 2007 May;104(3-5):154-60. PMID: 17467267.

Vanhoecke BW, Bracke ME, Kloosterboer HJ, et al. Tibolone and its metabolites inhibit invasion of human mammary carcinoma cells in vitro. *Maturitas.* 2006 Jun 20;54(3):229-37. PMID: 16581209.

Lund CO, Nilas L, Pedersen SH, et al. Tibolone and its metabolites acutely relax rabbit coronary arteries in vitro. *Maturitas.* 2004 Nov 15;49(3):179-88. PMID: 15488346.

Kloosterboer HJ. Tissue-selectivity: the mechanism of action of tibolone. *Maturitas.* 2004 Aug 30;48 Suppl 1:S30-40. PMID: 15337246.

**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.