

## Testosterone Datasheet

5<sup>th</sup> Edition (Revised in January, 2017)

### [ Product Information ]

**Name:** Testosterone

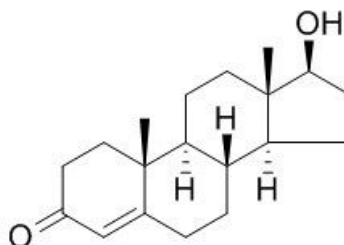
**Catalog No.:** CFN90034

**Cas No.:** 58-22-0

**Purity:** >=98%

**M.F:** C<sub>19</sub>H<sub>28</sub>O<sub>2</sub>

**M.W:** 288.42



**Physical Description:** Powder

**Synonyms:** 17beta-Hydroxyandrost-4-en-3-one; (8xi,9xi,14xi,17beta)-17-hydroxyandrost-4-en-3-one.

### [ Intended Use ]

1. Reference standards;
2. Pharmacological research;
3. Synthetic precursor compounds;
4. Intermediates & Fine Chemicals;
5. Others.

### [ Source ]

From *male lobster serum and testes*.

### [ Biological Activity or Inhibitors ]

Testosterone therapy for men with symptomatic androgen deficiency to induce and maintain secondary sex characteristics and to improve their sexual function, sense of well-being, muscle mass and strength, and bone mineral density.<sup>[1]</sup>

Testosterone replacement therapy reduces insulin resistance and improves glycaemic control in hypogonadal men with type 2 diabetes, improvements in glycaemic control, insulin resistance, cholesterol and visceral adiposity together represent an overall reduction in cardiovascular risk.<sup>[2]</sup>

Testosterone inhibits estrogen-induced mammary epithelial proliferation and suppresses estrogen receptor expression. <sup>[3]</sup>

Testosterone and dihydrotestosterone can inhibit adipocyte differentiation in vitro through an AR-mediated nuclear translocation of beta-catenin and activation of downstream Wnt signaling.<sup>[4]</sup>

## **[ Solvent ]**

Chloroform, Dichloromethane, Ethyl Acetate, DMSO, Acetone, etc.

## **[ HPLC Method ]<sup>[5]</sup>**

Mobile phase: Acetonitrile-H<sub>2</sub>O, gradient elution ;

Flow rate: 1.0 ml/min;

Column temperature: Room Temperature;

The wave length of determination: 245 nm.

## **[ Storage ]**

2-8°C, Protected from air and light, refrigerate or freeze.

## **[ References ]**

[1] Bhasin S, Cunningham G R, Hayes F J, *et al.* *J. Clin. Endocrinol. Metab.*, 2010, 95(6): 2536-59.

[2] Kapoor D, Goodwin E, Channer K S, *et al. Eur. J. Endocrinol.*, 2006, 154(6):899-906.

[3] Rosano G M, Leonardo F, Pagnotta P, *et al. Circulation*, 1999, 99(99):1666-70.

[4] Singh R, Artaza J N, Taylor W E, *et al. Endocrinology*, 2006, 147(1):141-54.

[5] Gonzalo-Lumbreras R, García-Miguens M A, Izquierdo-Hornillos R. *J. Pharm.Biomed. Anal.*, 2005, 38(4):757-62.

## **[ Contact ]**

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