Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Letrozole

Catalog No: tcsc1776

Available Sizes

Size: 100mg

Size: 200mg

Size: 500mg

Specifications

CAS No:
112809-51-5

Formula:
$C_{17}H_{11}N_5$

Pathway:
Autophagy;Others

Target:
Autophagy;Aromatase

Purity / Grade:
>98%

Solubility:
DMSO : 50 mg/mL (175.25 mM; Need ultrasonic)

Alternative Names:
CGS 20267

Observed Molecular Weight:
285.3

Product Description

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Letrozole(CGS-20267) is an oral non-steroidal aromatase inhibitor that has been introduced for the adjuvant.

Target: Aromatase

InVitro: Letrozole potently inhibits aromatase derived from a variety of different sources including human placental microsomes, particulate fractions of human breast cancer, rat ovarian microsomes, MCF-7 cells transfected with aromatase (MCF-7Ca), JEG-3 human choriocarcinoma cells, CHO cells, hamster ovarian tissue, and particulate fractions of human breast cancer with IC50 of 11, 2, 7, 0.07, 0.07, 1.4, 20 and 0.8 nM. In the non-cellular systems, the IC50 of letrozole is calculated to be 1-13 nM [1]. Letrozole maximally inhibits estradiol production in vitro in LH-stimulated hamster ovarian tissue at 0.1 μM with an IC50 of 0.02 μM and does not significantly affect progesterone production up to 350 μM. In ACTH-stimulated rat adrenal tissue in vitro, aldosterone production is inhibited by with an IC50 of 210 μM [2].

InVivo: Letrozole inhibits aromatase in vivo with ED50 of 1-3 μg/kg p.o. [2]. Letrozole displays anti-endocrine effects. Letrozole inhibits androstenedione-induced uterine hypertrophy in immature rats with ED50 of 1-3 μg/kg. In the adult female rat, Letrozole (0.3-1 mg/kg daily p.o., 14 days) completely interrupts ovarian cyclicity and reduces uterine weight and serum estradiol (E2) concentrations to a similar extent to that seen after ovariectomy [1]. Letrozole induces dose-dependent regression of estrogen-dependent, 9,10-dimethylbenz-a-anthracene (DMBA)-induced mammary tumors in adult female rats. The ED50 for Letrozole is determined to be 10 - 30μg/kg/day, with complete inhibition at a daily dose of 10μg /day [3]. Letrozole produces dose-dependent inhibition of tumor growth of MCF-7 cells transfected with human aromatase gene (MCF-7Ca) implanted athymic nude mice, with complete inhibition at 20 mg/kg per day p.o.[4].