

# Fadrozole hydrochloride

Catalog No: tcsc0002958



## Available Sizes

**Size:** 5mg

**Size:** 10mg

**Size:** 25mg

**Size:** 50mg

**Size:** 100mg



## Specifications

**CAS No:**

102676-31-3

**Formula:**

$C_{14}H_{14}ClN_3$

**Pathway:**

Others

**Target:**

Aromatase

**Purity / Grade:**

>98%

**Solubility:**

H2O : 100 mg/mL (385.02 mM; Need ultrasonic); DMSO : 100 mg/mL (385.02 mM; Need ultrasonic and warming)

**Alternative Names:**

CGS 16949A

### Observed Molecular Weight:

259.73

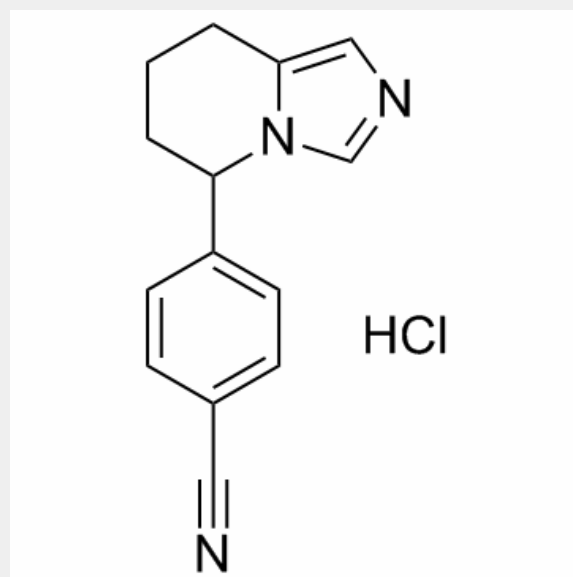
## Product Description

Fadrozole hydrochloride is a potent, selective and nonsteroidal inhibitor of **aromatase** with an **IC<sub>50</sub>** of 6.4 nM.

IC50 & Target: IC50: 6.4 nM (aromatase)<sup>[1]</sup>

**In Vitro:** Fadrozole hydrochloride is a potent, selective and nonsteroidal inhibitor of aromatase with an IC<sub>50</sub> of 6.4 nM. In hamster ovarian slices, Fadrozole hydrochloride inhibits the production of estrogen with an IC<sub>50</sub> of 0.03 μM. The production of progesterone is inhibited with an IC<sub>50</sub> of 120 μM. Synthesis of other cytochrome P-450 dependent steroids can be suppressed to various degrees with higher doses of Fadrozole hydrochloride<sup>[1]</sup>.

**In Vivo:** Fadrozole hydrochloride is able to inhibit the aromatase-mediated androstenedione-induced uterine hypertrophy in immature female rats with an ED<sub>50</sub> of 0.03 mg/kg when given orally. In the same model, aminoglutethimide elicits the same effect with an ED<sub>50</sub> of 30 mg/kg when given orally<sup>[1]</sup>. Fadrozole hydrochloride prevents the development of both benign and malignant spontaneous mammary neoplasms in female Sprague-Dawley rats. It also slows the spontaneous development of pituitary pars distalis adenomas in female rats, and reduces the incidence of spontaneous hepatocellular tumours in male and female rats<sup>[2]</sup>. Administration of Fadrozole hydrochloride in male and female mice suppresses the production of 17β-estradiol, accompanied with a 70% reduction in parasite burden. This protective effect is associated in male mice with a recovery of the specific cellular immune response. Interleukin-6 (IL-6) serum levels, and its production by splenocytes, is augmented by 80%, together with a 10-fold increase in its expression in testes of infected male mice. Fadrozole hydrochloride treatment returns these levels to baseline values<sup>[3]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!