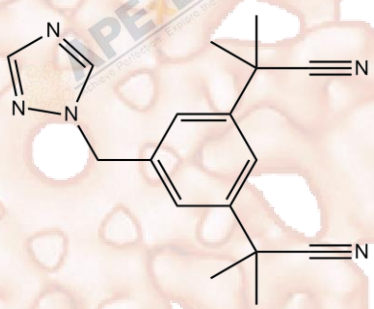
Product Data Sheet

Anastrozole



Cat. No.:	B1382
CAS No.:	120511-73-1
Formula:	C17H19N5
M.Wt:	293.37
Synonyms:	
Target:	Endocrinology and Hormones
Pathway:	Aromatase
Storage:	Store at -20°C

Solvent & Solubility

In Vitro

insoluble in H2O; ⩾14.15 mg/mL in DMSO; ⩾8.62 mg/mL in EtOH

Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	3.4087 mL	17.0433 mL	34.0866 mL
5 mM	0.6817 mL	3.4087 mL	6.8173 mL
10 mM	0.3409 mL	1.7043 mL	3.4087 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary	Aromatase inhibitor
IC_{50} & Target	

In Vitro

Cell Viability Assay

Cell Line:	MCF7, HepG2, and PC3 cell lines
Preparation method:	The solubility of this compound in DMSO is >14.2mg/mL. General tips for obtaining a higher concentration: Please warm the tube at 37°C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	25-400 μg/mL, 24h

	Applications:	In MCF7, HepG2, and PC3 cell lines, Anastrozole at 400 μg/mL showed the most significant cytotoxic toward all cell lines. Anastrozole at 400 μg/mL exhibited inhibition rates of 58.4%, 41.7% and 26.6% on MCF7, HepG2, and PC3 cell lines, respectively. In MCF7 breast cancer cells, Anastrozole (200 μg/mL) increased nuclear intensity corresponding to apoptotic changes by 38% and increased cell membrane permeability by 17.3%. Anastrozole also significantly increased cytochrome c release.
In Vivo	**Animal experiment**	
	Animal models:	adult female rats; mature male pigtailed monkeys (M. nernestrina)
	Dosage form:	Rats: 0.01-0.1 mg/kg, p.o., on day 2 at 16.00 h or day 3 at 12.00 hMonkeys: 0.003, 0.01, 0.03, 0.1, 0.3 and 1.0 mg/kg, p.o., twice daily (09.00 h and 16.00 h)
	Applications:	In adult female rats, Anastrozole (0.1 mg/kg) given on day 2 or day 3 completely blocked ovulation. In male pigtailed monkeys, Anastrozole (0.1 mg/kg and above) reduced circulating oestradiol concentrations by 50-60%. The clearance half-life of anastrozole in the monkey was about 7h.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

See more customer validations on www.apexbt.com.

References

[1]. Hassan F1, El-Hiti GA, Abd-Allateef M, et al. Cytotoxicity anticancer activities of anastrozole against breast, liver hepatocellular, and prostate cancer cells. Saudi Med J. 2017 Apr;38(4):359-365.

[2] Dukes M1, Edwards PN, Large M, Smith IK, Boyle T. The preclinical pharmacology of "Arimidex" (anastrozole; ZD1033)--a potent, selective aromatase inhibitor. J Steroid Biochem Mol Biol. 1996 Jul;58(4):439-45.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt

of the product, follow the storage recommendations on the product data sheet.

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