

Product Data Sheet

Product Name: Anastrozole-d12

Cat. No.: GC46854

Chemical Properties

Cas. No. 120512-32-5

SMILES [2H]C([2H])([2H])C(C([2H])([2H])[2H])(C#N)C1=CC(C(C([2H])([2H])[2H])(C#N)C([2H])([2H])[2H])=CC(CN2C=NC=N2)=C1

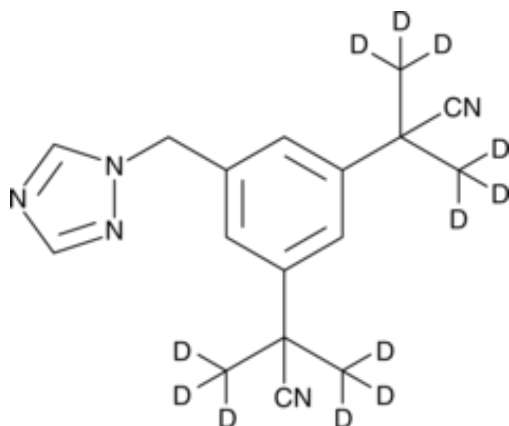
Formula C17H7D12N5 M.Wt 305.4

Solubility Chloroform: Soluble Storage Store at -20°C

General For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the tips ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Evaluation sample solution: ship with blue ice All other available size: ship with RT, or Condition blue ice upon request.

Structure



Background

Anastrozole-d₁₂ is intended for use as an internal standard for the quantification of anastrozole by GC- or LC-MS. Anastrozole is an aromatase/CYP19A1 inhibitor (IC₅₀ = 15 nM for human placental aromatase/CYP19A1).¹ It is selective for aromatase/CYP19A1 over the cytochrome P450 (CYP) isoforms CYP1A2, CYP2A6, CYP2C9, CYP2D6, and CYP3A (IC₅₀s = 27-650 μM). Anastrozole (0.1 mg/kg) blocks ovulation in mature female rats and androstenedione-stimulated uterine development in pubertal female rats.² It inhibits peripheral aromatase/CYP19A1 and reduces plasma estradiol

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

concentrations in male pigtailed monkeys when administered at doses greater than 0.1 mg/kg. Anastrozole (0.5 mg/kg) reduces tumor incidence and the number of tumors by 40 and 57%, respectively, as well as increases latency to tumor appearance in a rat model of premenopausal mammary tumorigenesis.³ Formulations containing anastrozole have been used in the treatment of breast cancer.

1.Grimm, S.W., and Dyroff, M.C.Inhibition of human drug metabolizing cytochromes P450 by anastrozole, a potent and selective inhibitor of aromataseDrug Metabolism and Disposition25(5)598-602(1997) 2.Plourde, P.V., Dyroff, M.C., and Dukes, M.Arimidex®: A potent and selective fourth-generation aromatase inhibitorBreast Cancer Res. Treat.30(1)103-111(1994) 3.Kubatka, P., SadlonovÁ, V., Kajo, K., et al.Chemopreventive effects of anastrozole in a premenopausal breast cancer modelAnticancer Res.28(5A)2819-2823(2008)

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA