

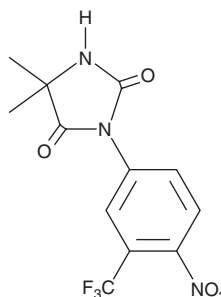
PRODUCT INFORMATION



Nilutamide

Item No. 23953

CAS Registry No.: 63612-50-0
Formal Name: 5,5-dimethyl-3-[4-nitro-3-(trifluoromethyl)phenyl]-2,4-imidazolidinedione
Synonym: RU-23908
MF: C₁₂H₁₀F₃N₃O₄
FW: 317.2
Purity: ≥98%
UV/Vis.: λ_{max}: 262 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Nilutamide is supplied as a crystalline solid. A stock solution may be made by dissolving the nilutamide in the solvent of choice, which should be purged with an inert gas. Nilutamide is soluble in organic solvents such as ethanol and DMSO. The solubility of nilutamide in these solvents is approximately 25 mM. Nilutamide is slightly soluble in chloroform and methanol.

Description

Nilutamide is a non-steroidal antiandrogen that is an antagonist of the androgen receptor.¹ It reverses testosterone-induced increases in cell proliferation with an IC₅₀ value of 412 nM in mouse mammary carcinoma cells *in vitro*.² It has antiandrogenic activity in both intact and castrated rats, inhibiting testosterone propionate-induced prostate growth when administered at a dose of 2.5 mg/kg.³ Formulations containing nilutamide have been used in combination with surgical castration in the treatment of metastatic prostate cancer.

References

1. Signh, S.M., Gauthier, S., and Labrie, F. Androgen receptor antagonists (antiandrogens): Structure-activity relationships. *Curr. Med. Chem.* **7**(2), 211-247 (2000).
2. Simard, J., Singh, S.M., and Labrie, F. Comparison of *in vitro* effects of the pure antiandrogens OH-flutamide, Casodex, and nilutamide on androgen-sensitive parameters. *Urology* **49**(4), 580-586 (1997).
3. Wakeling, A.E., Furr, B.J.A., Glen, A.T., *et al.* Receptor binding and biological activity of steroidal and nonsteroidal antiandrogens. *J. Steroid Biochem.* **15**, 355-359 (1981).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM