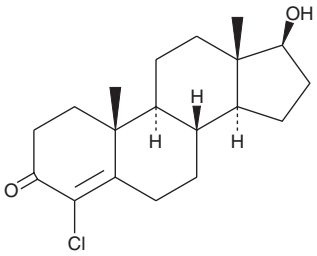
PRODUCT INFORMATION

Clostebol

Item No. 21168

CAS Registry No.:	1093-58-9
Formal Name:	4-chloro-17β-hydroxy-androst-4-en-3-one
Synonym:	4-chloro Testosterone
MF:	$C_{19}H_{27}ClO_2$
FW:	322.9
Purity:	≥98%
UV/Vis.:	λ_{max}: 254 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥5 years



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

Description

Clostebol (Item No. 21168) is an analytical reference standard that is categorized as an androgenic anabolic steroid. Clostebol is a chlorinated form of testosterone (Item Nos. 15645 | ISO60154) that has been used as an athletic performance enhancer and to fatten cattle.[1-3] It is also detectible in urine. Formulations containing clostebol have been used to treat osteoporosis, anorexia, and certain types of liver disease.[4-6] Clostebol is regulated as a Schedule III compound in the United States. This product is intended for research and forensic applications.

References

1. Lu, J., Fernández-Álvarez, M., Yang, S., *et al.* New clostebol metabolites in human urine by liquid chromatography time-of-flight tandem mass spectrometry and their application for doping control. *J. Mass. Spectrom.* **50(1)**, 191-197 (2015).
2. Debruyckere, G., de Sagher, R., and Van Peteghem, C. Clostebol-positive urine after consumption of contaminated meat. *Clin. Chem.* **38(9)**, 1869-1873 (1992).
3. Pereira, H.M., Marques, M.A., Talhas, I.B., *et al.* Incidental clostebol contamination in athletes after sexual intercourse. *Clin. Chem.* **50(2)**, 456-457 (2004).
4. Schanzer, W. and Donike, M. Metabolism of anabolic steroids in man: Synthesis and use of reference substances for identification of anabolic steroid metabolites. *Analytica Chim. Acta* **275(1-2)**, 23-48 (1993).
5. Calderón-Garcidueñas, L., Wen-Wang, L., Zhang, Y.J., *et al.* 8-Hydroxy-2'-deoxyguanosine, a major mutagenic oxidative DNA lesion, and DNA strand breaks in nasal respiratory epithelium of children exposed to urban pollution. *Environ. Health Perspect.* **107(6)**, 469-474 (1999).
6. Crabbe, P., Van Peteghem, C., Salden, M., *et al.* Influence of the hapten conjugation site on the characteristics of antibodies generated against metabolites of clostebol acetate. *J. Agric. Food Chem.* **48(8)**, 3633-3638 (2000).

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