

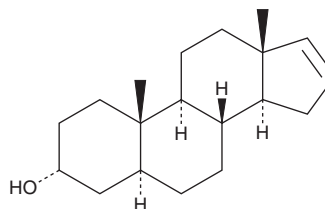
PRODUCT INFORMATION



5 α -Androst-16-en-3 α -ol

Item No. 33457

CAS Registry No.: 1153-51-1
Formal Name: (3 α ,5 α)-androst-16-en-3-ol
Synonyms: Androstenol, E 281, NSC 71076
MF: C₁₉H₃₀O
FW: 274.4
Purity: $\geq 95\%$
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

5 α -Androst-16-en-3 α -ol is supplied as a crystalline solid. A stock solution may be made by dissolving the 5 α -androst-16-en-3 α -ol in the solvent of choice, which should be purged with an inert gas. 5 α -Androst-16-en-3 α -ol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 5 α -androst-16-en-3 α -ol in these solvents is approximately 30, 10, and 20 mg/ml, respectively.

Description

5 α -Androst-16-en-3 α -ol is a steroid pheromone that has been found in boar testes and human male axillary sweat and has diverse biological activities.^{1,2} It enhances GABA-activated currents in primary mouse cerebellar granule cells ($EC_{50} = 0.4 \mu M$).² 5 α -Androst-16-en-3 α -ol (0.1-1 μM) increases the amplitude of GABA-activated currents in HEK293 cells expressing human $\alpha_1\beta_2\gamma_2$ and $\alpha_2\beta_2\gamma_2$ subunit-containing GABA_A receptors. *In vivo*, 5 α -androst-16-en-3 α -ol (5-10 mg/kg) decreases immobility time in the forced swim test in mice. It increases time spent in the open arms of the elevated plus maze in mice, indicating anxiolytic-like activity, when administered at doses ranging from 30 to 50 mg/kg. 5 α -Androst-16-en-3 α -ol protects against seizures induced by pentylenetetrazole (PTZ; Item No. 18682) or electroshock in mice ($ED_{50} = 48.9$ and 21.9 mg/kg, respectively).

References

1. Brooksbank, B.W., Brown, R., and Gustafsson, J.A. The detection of 5 α -androst-16-en-3 α -ol in human male axillary sweat. *Experientia* **30**(8), 864-865 (1974).
2. Kaminski, R.M., Marini, H., Ortinski, P.I., et al. The pheromone androstenol (5 α -androst-16-en-3 α -ol) is a neurosteroid positive modulator of GABA_A receptors. *J. Pharmacol. Exp. Ther.* **317**(2), 694-703 (2006).

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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