

Certificate of Analysis

BDG Synthesis certifies that this reference material meets or exceeds the specifications stated herein.

Ceil Beare

Neil Beare, PhD, Director 22 February 2003

7-Ketodehydroepiandrosterone Name:

566-19-8 **CAS Number:**

Structure:

Molecular Weight: $C_{19}H_{26}O_3 = 302.41$

Lot Number: BDG 4277.2

Appearance: White, crystalline solid

99.7 % **Purity By HPLC:**

Re-test Date: 22 February 2008

Storage and Handling: Temperature: refrigerate for prolonged storage; may be handled and shipped at

ambient temperature.

Humidity: not believed to be hygroscopic; may be handled in normal laboratory

atmosphere.

Light: protect from strong sunlight.

Caution: only experienced laboratory personnel should handle the material.

Identity and Purity

Proton NMR Spectrum

Identity: the signals are consistent with the proposed structure and in accord with literature where available.

Residual Solvents: a trace (under 0.1 % w/w) of ethyl acetate is observed.

Impurities: no significant impurities are evident in the spectrum.

Carbon-13 NMR Spectrum

Identity: the signals are consistent with the proposed structure and in accord with literature where available.

High-resolution Mass Spectrum (EI+)

Found m/z 302.1882. $C_{19}H_{26}O_3$ [M]⁺ requires m/z 302.1882. The deviation of 0.0 ppm is within normally accepted limits for the establishment of identity by HRMS.

HPLC

A somewhat broadened, symmetrical peak is observed (99.7 %). Note: in the absence of reference materials for preparing calibration curves, it is assumed that all peaks have the same detector response. Where possible, the conditions of analysis follow a pharmacopeial or literature method, or have been adapted from same.

Elemental Analysis

Found: C 75.73, H 8.93 %

C₁₉H₂₆O₃ Requires: C 75.46, H 8.67 %

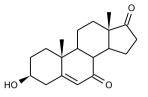
The elemental analyses fall within generally accepted limits for establishing the molecular formula given. The results may also be taken to imply the absence of significant quantities of water or inorganic salts (which have not been elsewhere tested for because of sample size limitations).

The available quantity of custom-synthesised material is always small, and this limits the extent and type of analytical data which can be obtained. This Certificate is presented in descriptive format for use by analytical chemists who are trained in the use of custom-synthesised materials. Custom materials often contain higher levels of residual solvents and/or water, and we urge you to use the corrected purity where needed rather than the raw HPLC purity. This compound is intended for use as an analytical reference material and it is not for human administration. Structures are shown with relative stereochemistry unless otherwise specified.

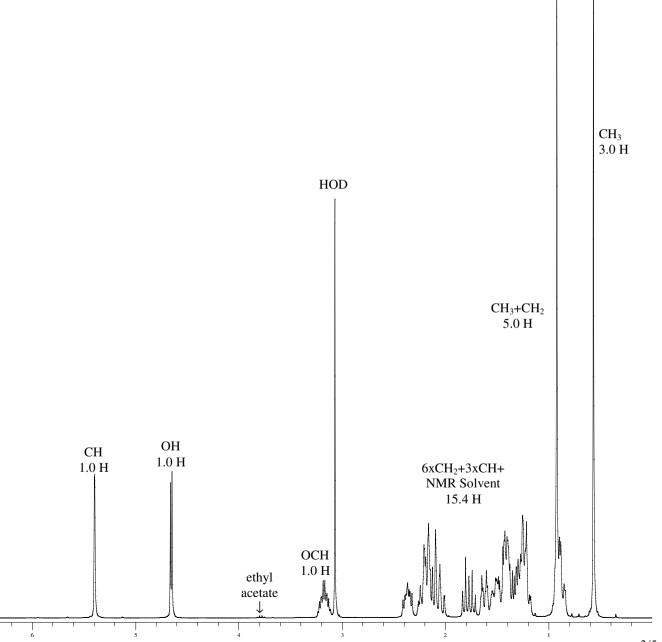
The re-test date is assigned from experience gained with the material in the laboratory and/or on storage. It is not possible to perform formal storage studies because of the small amount of material available.



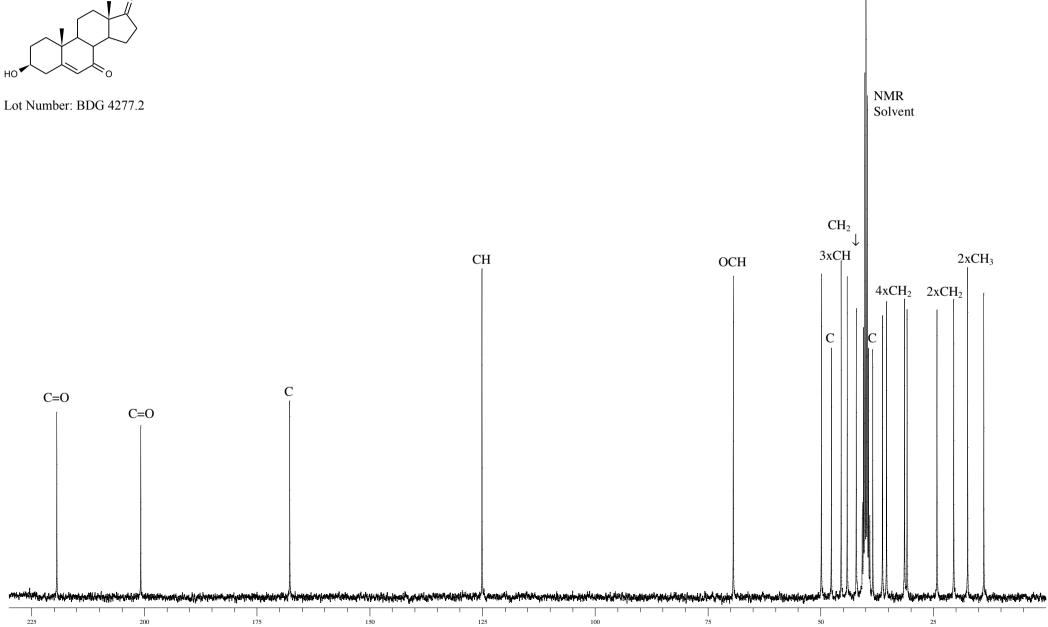
BDG SYNTHESIS



Lot Number: BDG 4277.2



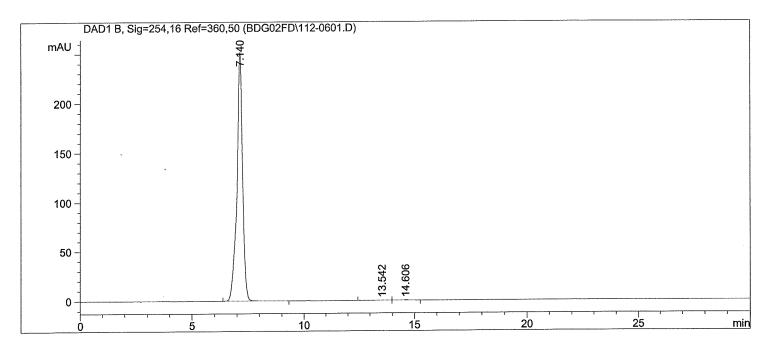




Injection Date : 2/22/03 2:40:04 PM Seq. Line : 6 Sample Name : BDG4277.2 Location : Vial 112 Acq. Operator : admin Inj : 1 Inj Volume : 10 μ l

Acq. Method : N:\LC1100\1\METHODS\LC10032B.M Last changed : 2/22/03 11:32:41 AM by admin Analysis Method : N:\LC1100\1\METHODS\LC10129A.M Last changed : 2/26/03 11:00:16 AM by admin

BDG - isocratic analysis of 7-Keto-dehydroepiandrosterone on Luna C18, 5um, 250 x 4.6mm ID. # LC10129



Area Percent Report

Gamed Dr. Gignal

Sorted By : Signal Multiplier : 1.0000 Dilution : 1.0000

Signal 1: DAD1 B, Sig=254,16 Ref=360,50

#	RetTime [min]		[min]	Area [mAU*s]	Height [mAU]	Area %
1 '	7.140	MM	0.2933	4436.84180	252.16481	99.7269
2	13.542	MF	0.6409	4.02091	1.04567e-1	0.0904
	14.606		0.5650	8.13025	2.39833e-1	0.1827

Totals: 4448.99296 252.50921

Results obtained with enhanced integrator!

*** End of Report ***