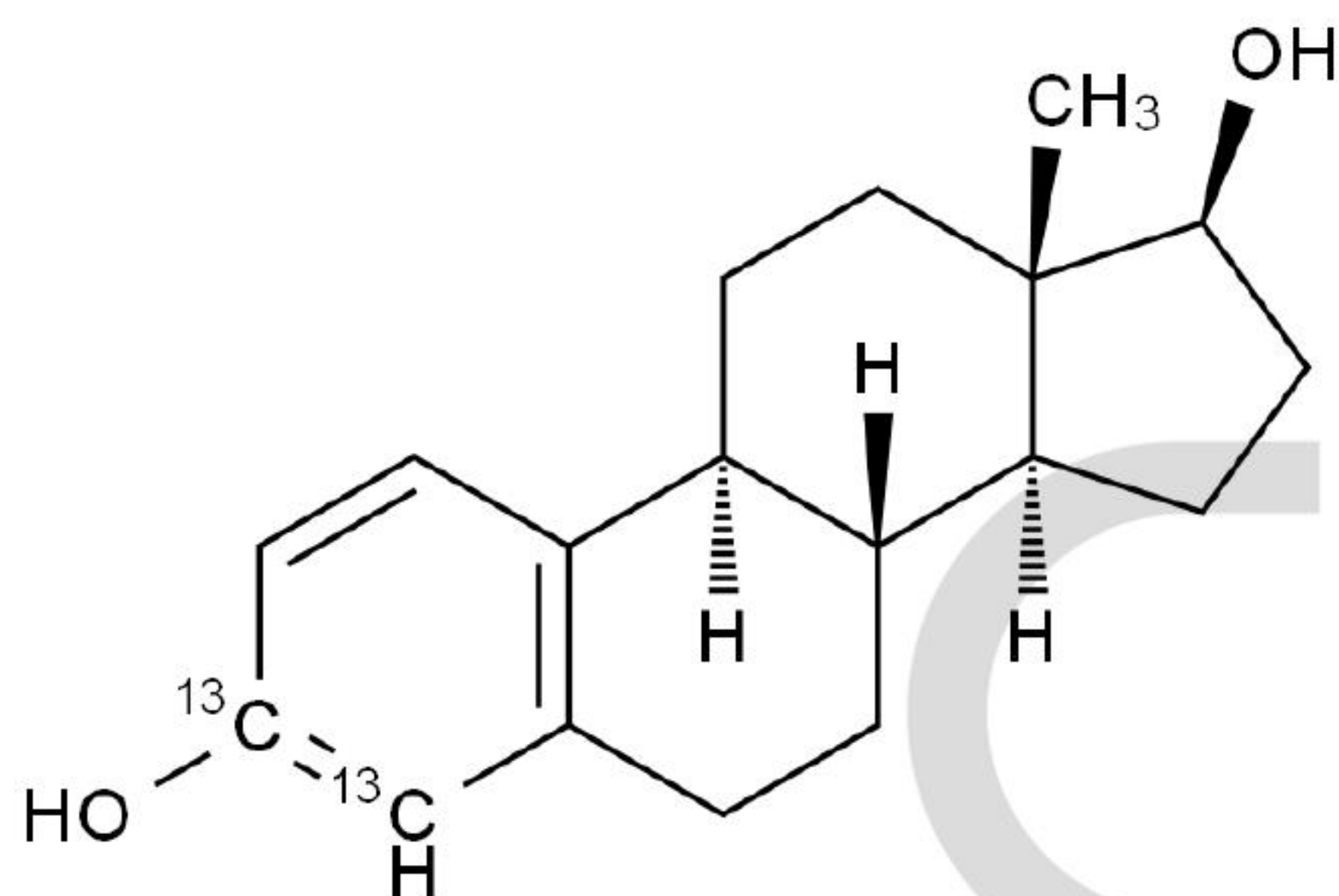


Certificate of Analysis

Reference Material & Standard

Product Name:	17beta-Estradiol-13C2	Catalogue Number:	CCAD301071
Synonyms:	N/A	Lot Number:	0624-RC-0046
CAS Number:	82938-05-4	Expiry Date:	Apr 03, 2025
Molecular Formula:	C16[13C]2H24O2	Storage:	-20°C±5°C Protected from light and Sealed
Molecular Weight:	274.37	Warning:	

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	White to Off-White Solid
Identification	CNMR&HNMR	Confirmed
Chemical Purity	NMR	94.0%
Isotopic Purity		95.0%
Uncertainty		±2.0%

Comment:

The uncertainty values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Signature:

Prepared by:

Hin Lam

Reviewed by:

Debia

Approved by General Manager:

David

Date: Mar 05, 2018

Date: Jun 29, 2021

Date: Jun 29, 2021

