## **Certificate of Analysis**

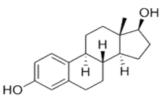
## **Product Identification**

Catalog number Compound name Chemical name HB2494 17-beta-estradiol (8R,9S,13S,14S,17S)-13-methyl-6,7,8,9,11,12,14,15,16,17decahydrocyclopenta[a]phenanthrene-3,17-diol

Batch number Batch molecular formula Batch molecular weight E0590-1-1 C<sub>18</sub>H<sub>24</sub>O<sub>2</sub>.0.6H<sub>2</sub>O 283.00



## Chemical Structure



Method	QC requirement	QC Result	
HPLC NMR	Reverse Phase HPLC shows >98% purity 1H NMR in DMSO at 400 MHz consistent with structure	Meets specification: 98.7% Meets specification	
Mass spectrum	Electrospray positive analysis consistent with structure	Meets specification	
Microanalysis	Elemental analysis is within 0.4% for the batch molecular formula	Meets specification	
TLC	TLC analysis in 10% MeOH/DCM shows one spot under uv	Meets specification: R <sub>f</sub> =0.60	
Physical appearance	White to off-white solid	Meets specification: White solid	
Solubility	Soluble in DMSO (100 mM) and in ethanol (75 mM)	Meets specification	

**Biological validation** 

Produced by	Richard Patterson	Signature	Roman
Passed by	Huw Davies	Signature	Hun De
		Date	25-04-17

This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.