Certificate of Analysis

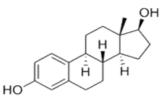
Product Identification

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 C₁₈H₂₄O₂.0.6H₂O 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 _f =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.