

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2025-06-23 11:25:02
 Date of Next Testing: 2028-06-22 11:25:02
 Product Name: **Estra-5(10),9(11)-diene-3,17-dione 3-Ethylene Ketal**
 CAS Number: 5571-36-8
 Specifications & Purity: $\geq 98\%$ (HPLC)
 Lot #: L1909001
 SKU #: **E135189**
 Version: **0**
 Analysis #: **529471**
 Storage Temperature: Room temperature

Parameter	Limit Values	Result
Melting point	145-160 (°C)	148.00000 °C
Specific Rotation $[\alpha]_{20/D}(c=0.005\text{g/ml MeOH})$	300-320 (°)	315.00000 °
Purity(HPLC)	98-100 (%)	98.10000 %
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager