

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-06-20 13:54:41  
 Date of Next Testing: 2027-06-19 13:54:41  
 Product Name: **Betulinic acid**  
 CAS Number: 472-15-1  
 Specifications & Purity: 97%  
 Lot #: F2310907  
 SKU #: **B123958**  
**Analysis:** **226684**  
 Storage Temperature: Store at 2-8°C

| Parameter  | Limit Values   | Result   |
|--|--|--|
| Purity(HPLC)   | 97-100 (%)   | 99.61500 %   |
| Water by Karl Fischer  | 0-5 (%)  | 0.36 %   |
| Purity(Neutralization titration)<br>(after drying)           | 96.5-103.5 (%)   | 101.85 %   |
| Specific Rotation [α] <sub>20</sub> /D(c=0.9 in<br>Pyridine) | 6-10 (°)   | 6.73 °   |
| Appearance (B123958)   | White to Light yellow to Light orange<br>powder to crystal | White to Light yellow to Light orange<br>powder to crystal |
| Solubility in EtOH , Colorless<br>Clear,1 mg/mL              | pass   | Pass   |
| Infrared spectrum  | Conforms to Structure                                      | Conforms to Structure                                      |



John Su  
QA & QC Manager