

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2022-07-05 21:47:45  
Date of Next Testing: 2024-07-04 21:47:45  
Product Name: **DL-Norepinephrine Hydrochloride**  
CAS Number: 55-27-6  
Specifications & Purity: 97%  
Lot #: G2203207  
SKU #: **D134211**  
**Analysis:** **095602**  
Storage Temperature: Store at -20°C

Parameter	Limit Values	Result
Nitrogen by Elemental Analysis	6.5-7.1 (%)	6.70 %
Water by Karl Fischer	0-4.2 (%)	0.18 %
Carbon by Elemental Analysis	45.6-47.9 (%)	46.72 %
Purity(HPLC)	97-100 (%)	98.94500 %
Appearance (D134211)	Off-white to tan crystals,powder or chunks	Off-white to tan crystals,powder or chunks
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Solubility in H <sub>2</sub> O , Faint Yellow to Yellow-Brown,Clearpass to Hazy,50mg/ml		Pass



John Su  
QA & QC Manager