

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2024-04-10 13:56:45
Date of Next Testing: 2028-04-09 13:56:45
Product Name: **Protoporphyrin IX**
CAS Number: 553-12-8
Specifications & Purity: $\geq 95\%$
Lot #: C2430124
SKU #: **P103197**
Analysis: **328219**
Storage Temperature: Store at 2-8°C, Protected from light

Parameter	Limit Values	Result
EmM(in 3 M HCl,408-409nm)	200-300	230.00
Purity(HPLC)	95-100 (%)	95.26000%
Carbon by Elemental Analysis	68.6-76.6 (%)	68.65 %
Nitrogen by Elemental Analysis	9.4-10.6 (%)	9.81 %
Appearance (P103197)	Red to Brown to Dark purple to Black Powder	Red to Brown to Dark purple to Black Powder
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Solubility in DMF/MeOH (1/1) , Dark Red to Brown ,10 mg/mL	pass	Pass



John Su
QA & QC Manager