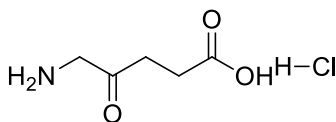




Certificate of Analysis

MedKoo Cat#:	Product Name:	Lot#
100054	Aminolevulinic acid HCl	TZC61205

Chemical name	
5-amino-4-oxopentanoic acid hydrochloride	
Synonyms	
5-ALA; ALA; dALA; 5-aminolevulinic acid; aminolevulinic acid; Aminolevulinic Acid HCl; Aminolevulinic Acid hydrochloride; US brand name: Levulan..	
Chemical structure	CAS# and Theoretical analysis
	MedKoo Cat#: 100054 Name: Aminolevulinic acid HCl CAS#: 5451-09-2 Lot#TZC61205 Chemical Formula: C ₅ H ₁₀ ClNO ₃ Molecular Weight: 167.59

Analysis item	Specifications / Results
Appearance	Yellow solid powder
Structure	¹ H-NMR analysis matches the structure. MS analysis gives the correct molecule weight. Both NMR and MS data are consistent with those reported in the literature.
Purity (HPLC)	>99.0%
Solubility	Soluble in water.
Conclusion	This product conforms with MedKoo's quality standards
Shipping condition	Shipped under ambient temperature as non-hazardous chemical. This product is stable for a few weeks during ordinary shipping and time spent in customs.
Storage condition	Short term storage (weeks): 0 – 4 °C under dry condition Long term storage (months): -20 °C under dry condition
Shelf life	At least 5 years if properly stored.

CAUTION: NOT FULLY TESTED. FOR RESEARCH ONLY, NOT FOR HUMAN USE