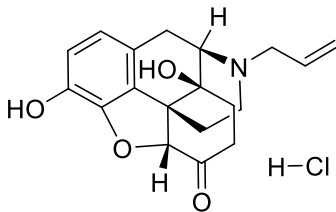




Certificate of Analysis

MedKoo Cat#:	Product Name:	Lot#:
329670	Naloxone HCl	A8T09K21

Chemical name	
(4R,4aS,7aR,12bS)-3-allyl-4a,9-dihydroxy-2,3,4,4a,5,6-hexahydro-1H-4,12-methanobenzofuro[3,2-e]isoquinolin-7(7aH)-one hydrochloride	
Synonyms	
Naloxone HCl; EN-15304; EN15304; EN 15304; NIH7890; Naloxone hydrochloride; Narcan; Narcanti; Nalonee	
Chemical structure	CAS# and Theoretical analysis
	MedKoo Cat#: 329670 Name: Naloxone HCl CAS#: 357-08-4 (HCl) Lot#: A8T09K21 Chemical Formula: C ₁₉ H ₂₂ ClNO ₄ Molecular Weight: 363.84

Analysis item	Specifications / Results
Appearance	White to off-white 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 DMSO
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