

Certificate of Analysis

MedKoo Cat#:	Product Name:	Lot#:
100710	Pemetrexed disodium heptahydrate	YYP30820

Chemical name			
(S)-2-(4-(2-(2-amino-4-oxo-4,7-dihydro-1H-pyrrolo[2,3-d]pyrimidin-5-			
yl)ethyl)benzamido)pentanedioate heptahydrate.			
Synonyms			
LY231514; LY-231514; LY 231514; Pemetrexed, US brand name: ALIMTA. Abbreviation:			
MTA.			
Chemical structure	CAS# and Theoretical analysis		
$H_{2}N + N + O + H_{2}N +$	MedKoo Cat#: 100710 Name: Pemetrexed disodium heptahydrate CAS#: 357166-29-1 (sodium hydrate) Lot#: YYP30820 Chemical Formula: C ₂₀ H ₃₃ N ₅ Na ₂ O ₁₃ Molecular Weight: 597.49		

Analysis item	Specifications / Results	
Appearance	Off-white to light 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	Very poorly soluble in DMSO; soluble in water at 100 mg/mL; very poorly soluble in ethanol.	
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