Certificate of Analysis

MedKoo Cat#:	Product Name:	Lot#:
333194	Cilengitide free base	T20D09P01

Chemical name 2-((2S,5R,8S,11S)-5-benzyl-11-(3-((diaminomethylene)amino)propyl)-8-isopropyl-7-methyl-3,6,9,12,15-pentaoxo-1,4,7,10,13-pentaazacyclopentadecan-2-yl)acetic acid Synonyms EMD-85189; EMD 85189; EMD85189; EMD-121974; EMD121974; EMD 121974; NSC-

EMD-85189; EMD 85189; EMD85189; EMD-121974; EMD121974; EMD 121974; NSC-707544; D03497; Cyclo(L-arginylglycyl-L-aspartyl-D-phenylalanyl-N-methyl-L-valyl)

Chemical structure	CAS# and Theoretical analysis
0 //	MedKoo Cat#: 333194
OH OH	Name: Cilengitide free base
0 NH H 0	CAS#: 188968-51-6 (free base)
HN HN	Lot#: T20D09P01
H ₂ N NH N	Chemical Formula: C ₂₇ H ₄₀ N ₈ O ₇
NH ₂	Exact Mass: 588.302
	Molecular Weight: 588.67

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