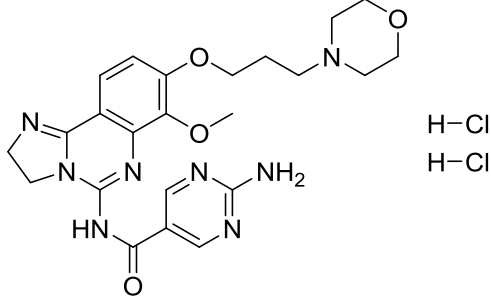




Certificate of Analysis

MedKoo Cat#: 206945	Product Name: Copanlisib HCl	Lot#: S8S05C02
-------------------------------	--	--------------------------

Chemical name	
5-Pyrimidinecarboxamide, 2-amino-N-(2,3-dihydro-7-methoxy-8-(3-(4-morpholinyl)propoxy)imidazo(1,2-C)quinazolin-5-yl)-, hydrochloride (1:2)	
Synonyms	
Copanlisib HCl; Copanlisib dihydrochloride; BAY 80-6946; BAY80-6946; BAY-80-6946; BAY806946; BAY-806946; BAY 806946; Copanlisib; trade name Aliqopa	
Chemical structure	CAS# and Theoretical analysis
 <p>H-Cl H-Cl</p>	MedKoo Cat#: 206945 Name: Copanlisib HCl CAS#: 1402152-13-9 (HCl) Lot#: S8S05C02 Chemical Formula: C ₂₃ H ₃₀ Cl ₂ N ₈ O ₄ Exact Mass: Molecular Weight: 553.45

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)	>98.0%
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