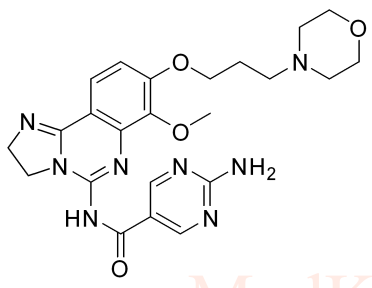
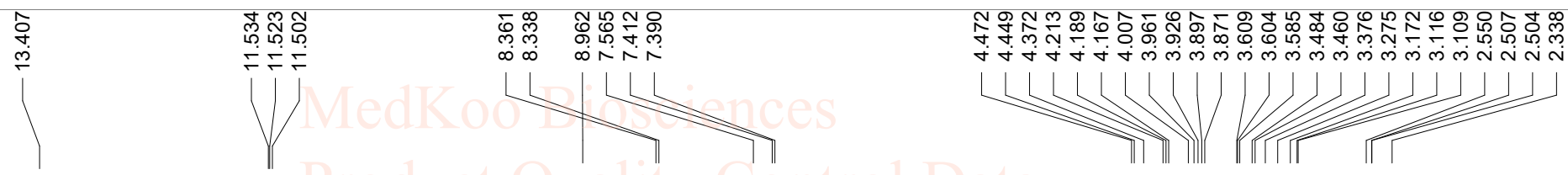


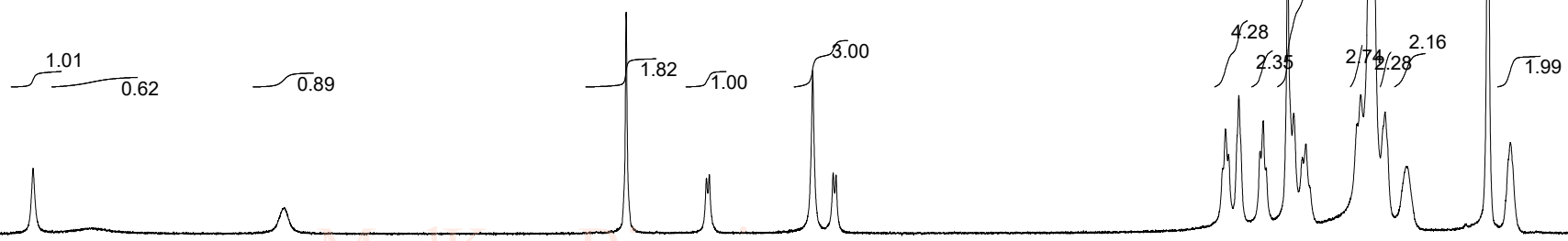
# NMR analysis, Copanlisib HCl, solvent=DMSO



H-Cl  
H-Cl

MedKoo Cat#: 206945  
 Name: Copanlisib HCl  
 CAS#: 1402152-13-9 (HCl)  
 Lot#: S8S05C02  
 Chemical Formula: C<sub>23</sub>H<sub>30</sub>Cl<sub>2</sub>N<sub>8</sub>O<sub>4</sub>  
 Exact Mass:  
 Molecular Weight: 553.45

MedKoo Biosciences  
 Product Quality Control Data  
 www.medkoo.com sales@medkoo.com

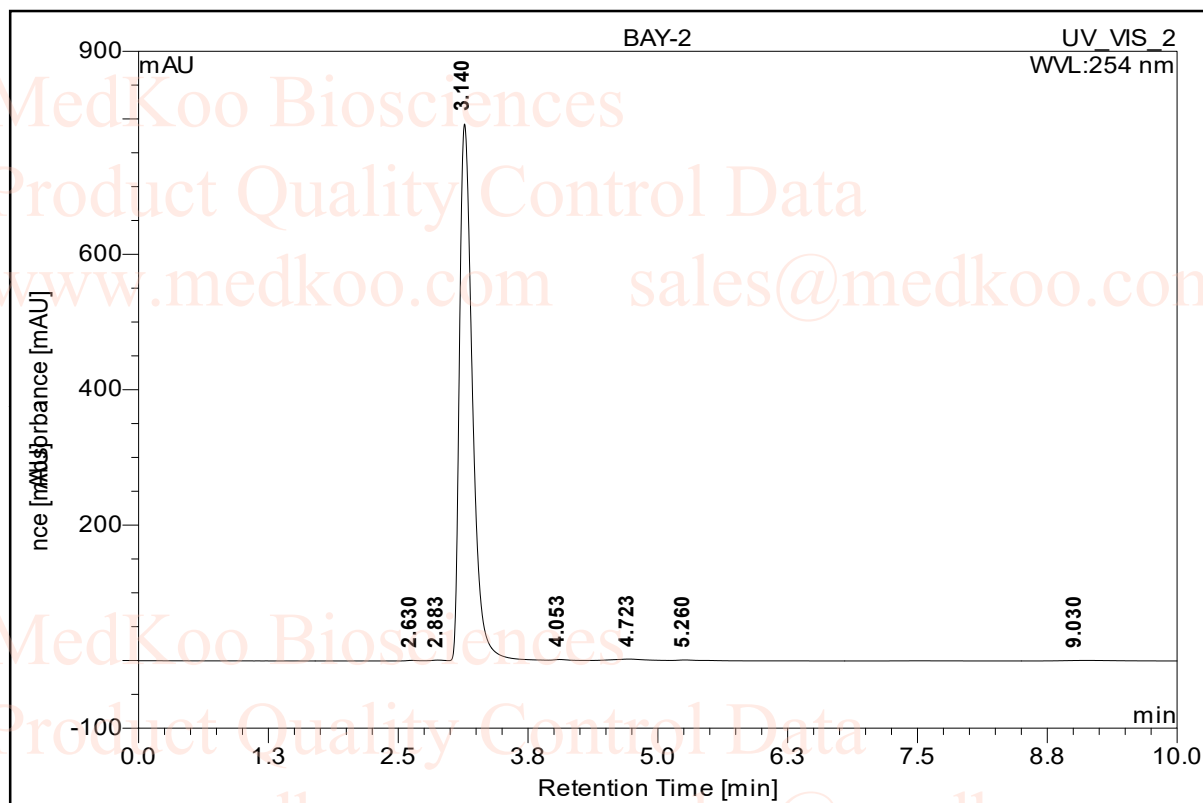


14 12 10 8 6 4 2 0 PPM

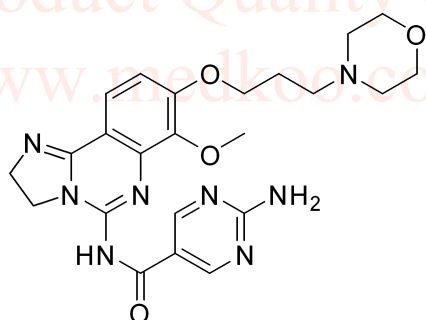
Copanlisib.2HCl,d6-DMSO,400MHz		SW1: 6831		OF1: 2634.1		PTS1d: 16384	
F1: 399.791	F2: 100.536	PW: 5.6 usec	PD: 1.0 sec	NA: 20	LB: 0.0		
EX: s2pul							

# HPLC analysis, Copanlisib HCl

Sample Name:	<b>BAY-2</b>	Injection Volume:	<b>2.0</b>
Vial Number:	<b>RE1</b>	Channel:	<b>UV_VIS_2</b>
Sample Type:	<b>unknown</b>	Wavelength:	<b>254</b>
Control Program:		Bandwidth:	<b>4</b>
Quantif. Method:	<b>default</b>	Dilution Factor:	<b>1.0000</b>
Sample Weight:	<b>1.0000</b>	Sample Amount:	<b>1.0000</b>
Run Time (min)	<b>10.14</b>		



No.	Ret.Time min	Peak Name	Height mAU	Area mAU*min	Rel.Area %	Amount n.a.	Type
1	2.63	n.a.	0.678	0.066	0.06	n.a.	BM *
2	2.88	n.a.	0.841	0.094	0.08	n.a.	MB*
3	3.14	n.a.	792.652	114.803	99.25	n.a.	BMB*
4	4.05	n.a.	1.086	0.133	0.12	n.a.	bMB*
5	4.72	n.a.	1.662	0.436	0.38	n.a.	BMB*
6	5.26	n.a.	0.774	0.125	0.11	n.a.	BMB*
7	9.03	n.a.	0.095	0.017	0.01	n.a.	BMB*
<b>Total:</b>			<b>797.788</b>	<b>115.674</b>	<b>100.00</b>	<b>0.000</b>	

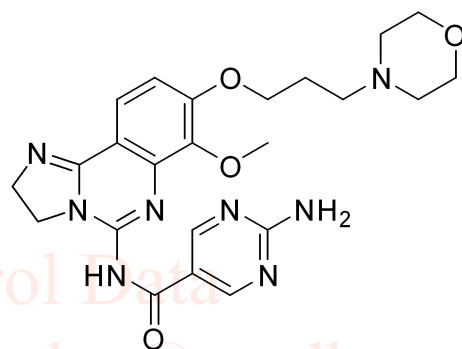
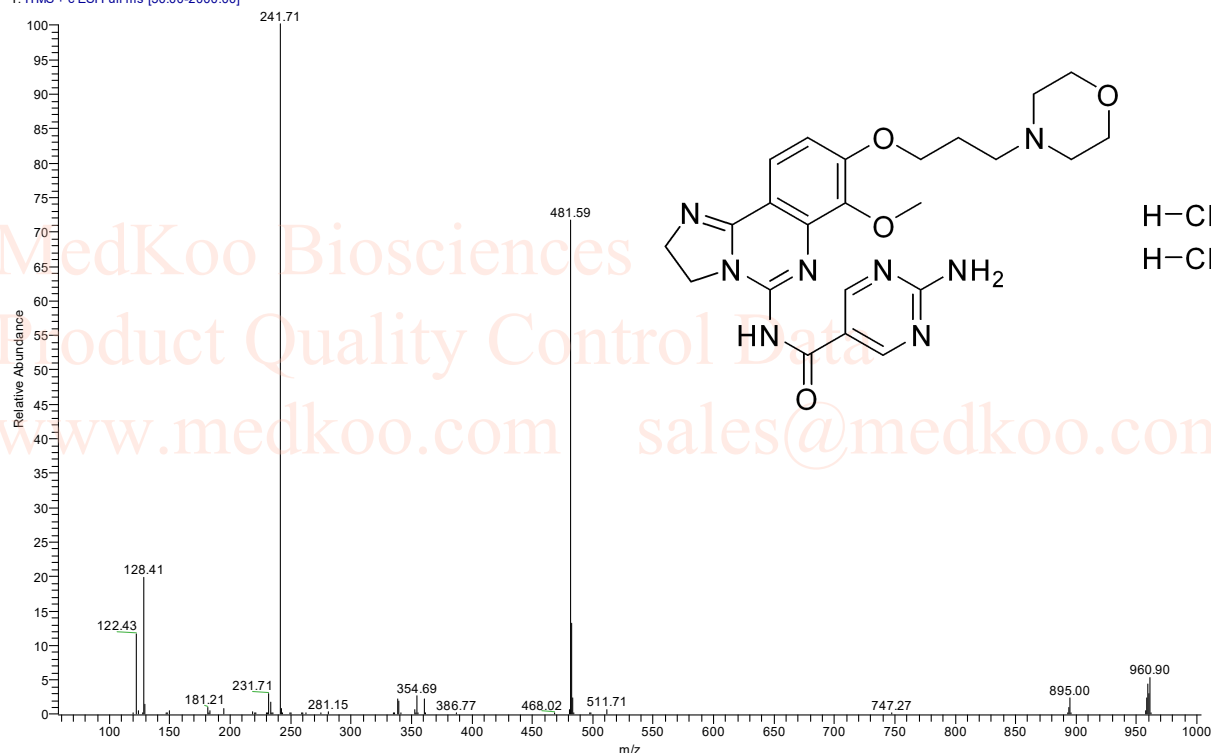


H-Cl  
H-Cl

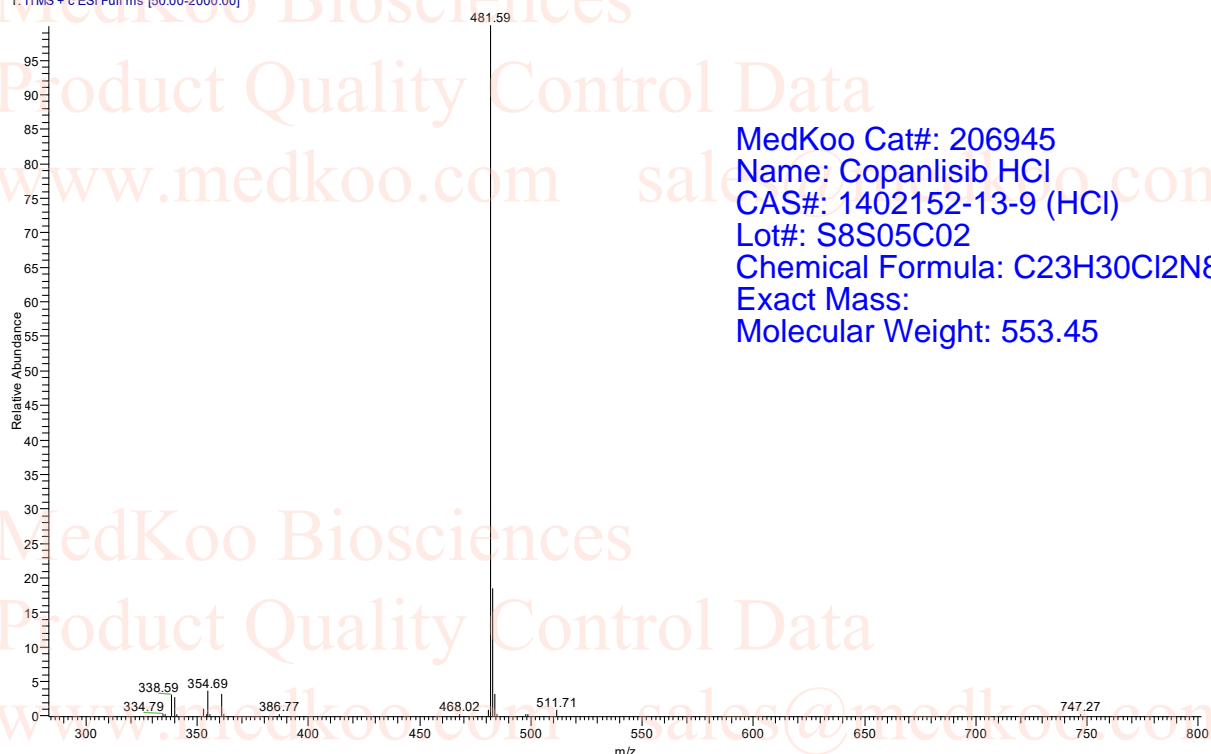
MedKoo Cat#: 206945  
 Name: Copanlisib HCl  
 CAS#: 1402152-13-9 (HCl)  
 Lot#: S8S05C02  
 Chemical Formula: C<sub>23</sub>H<sub>30</sub>Cl<sub>2</sub>N<sub>8</sub>O<sub>4</sub>  
 Exact Mass:  
 Molecular Weight: 553.45

# MS analysis, Copanlisib HCl

cop\_180502163403 #148-183 RT: 1.46-1.81 AV: 36 NL: 4.82E4  
T: [TMS + c ESI Full ms [50.00-2000.00]]



cop\_180502163403 #148-183 RT: 1.46-1.81 AV: 36 NL: 3.45E4  
T: [TMS + c ESI Full ms [50.00-2000.00]]



MedKoo Cat#: 206945  
Name: Copanlisib HCl  
CAS#: 1402152-13-9 (HCl)  
Lot#: S8S05C02  
Chemical Formula: C<sub>23</sub>H<sub>30</sub>Cl<sub>2</sub>N<sub>8</sub>O<sub>4</sub>  
Exact Mass:  
Molecular Weight: 553.45