

## Supporting Information

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### Synthesis of some natural sulphonamide derivatives as carbonic anhydrase inhibitors

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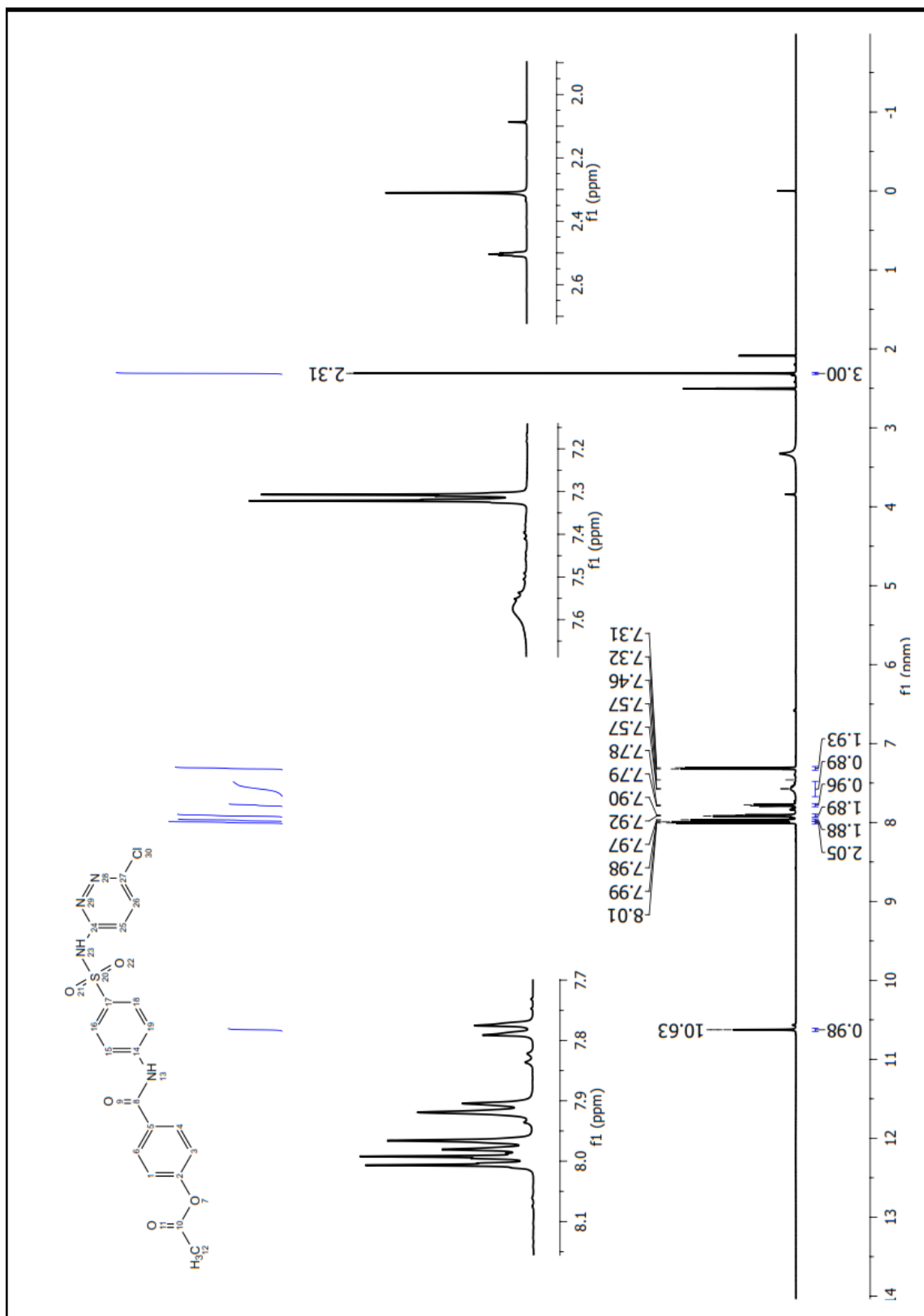
<sup>5</sup>Programming of Diseases Research Chair, Zoology Department, College of Science, King Saud University, Riyadh, Saudi Arabia

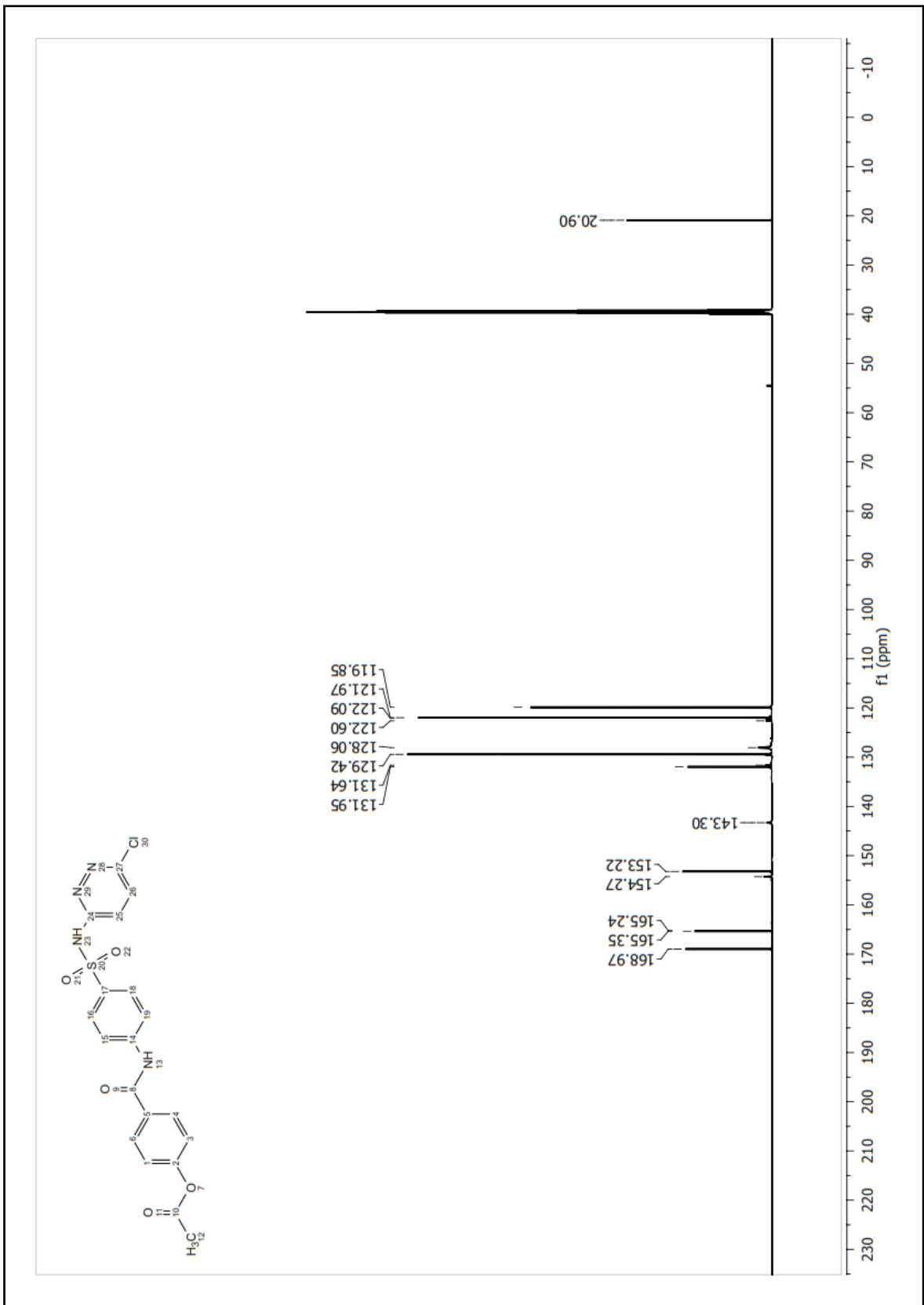
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## Mass Spectrum Molecular Formula Report

### Analysis Info

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 Method gok\_tune\_wide.m  
 Sample Name  
 Comment

Acquisition Date 6/5/2014 4:34:18 PM

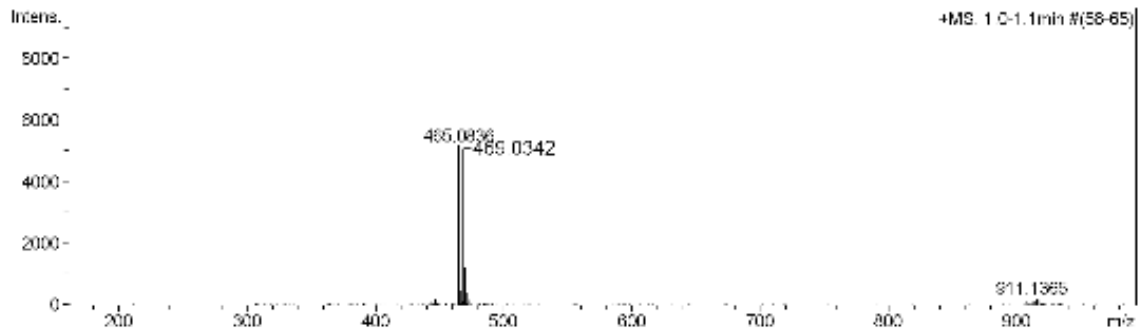
Operator bruker customer  
 Instrument / Ser# micrOTOF-Q 55

### Acquisition Parameter

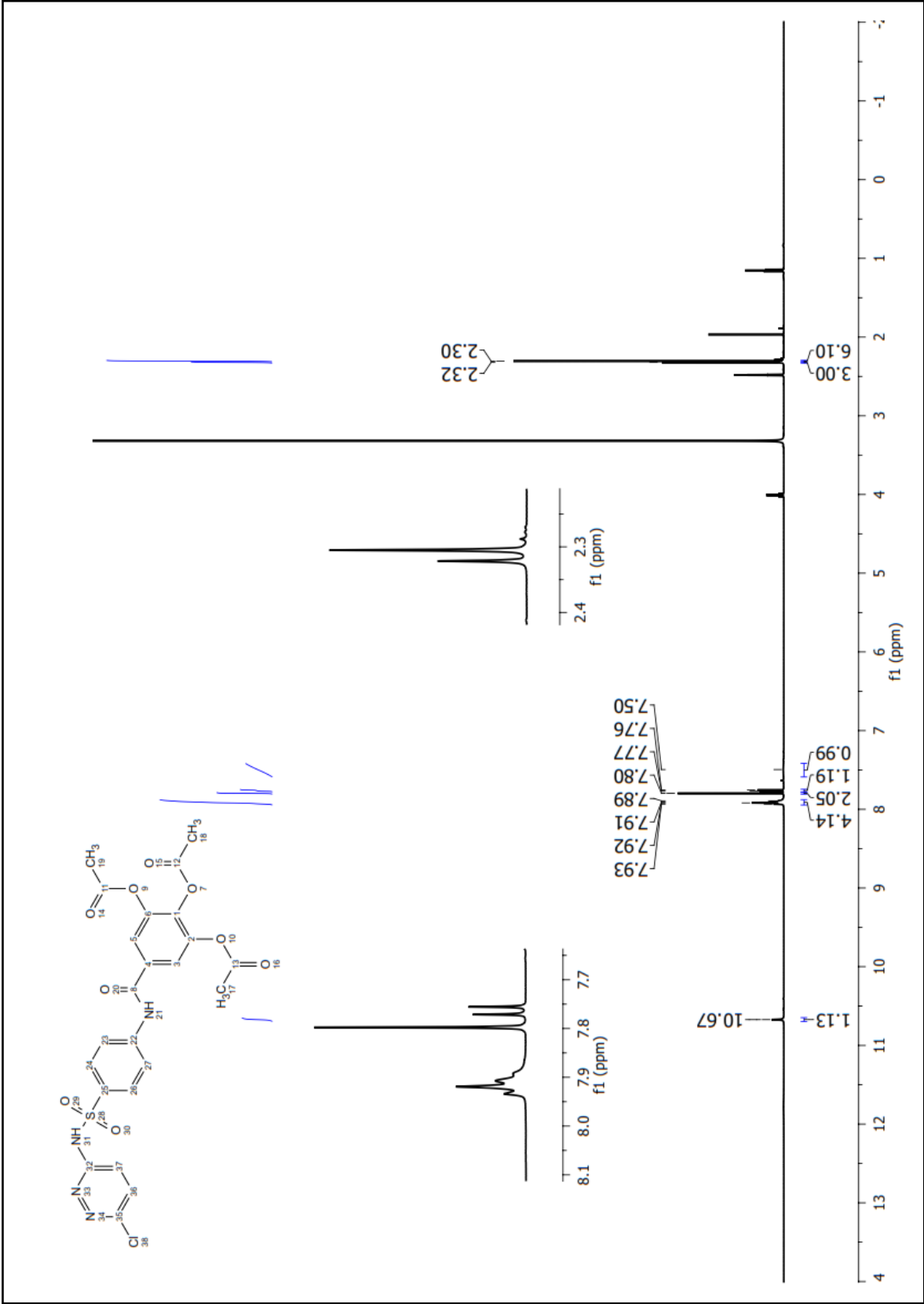
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Focus	Not active	Set Capillary	5000 V	Set Dry Heater	200 °C
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Scan End	1000 m/z	Set Collision Cell RF	600.0 Vpp	Set Divert Valve	Waste

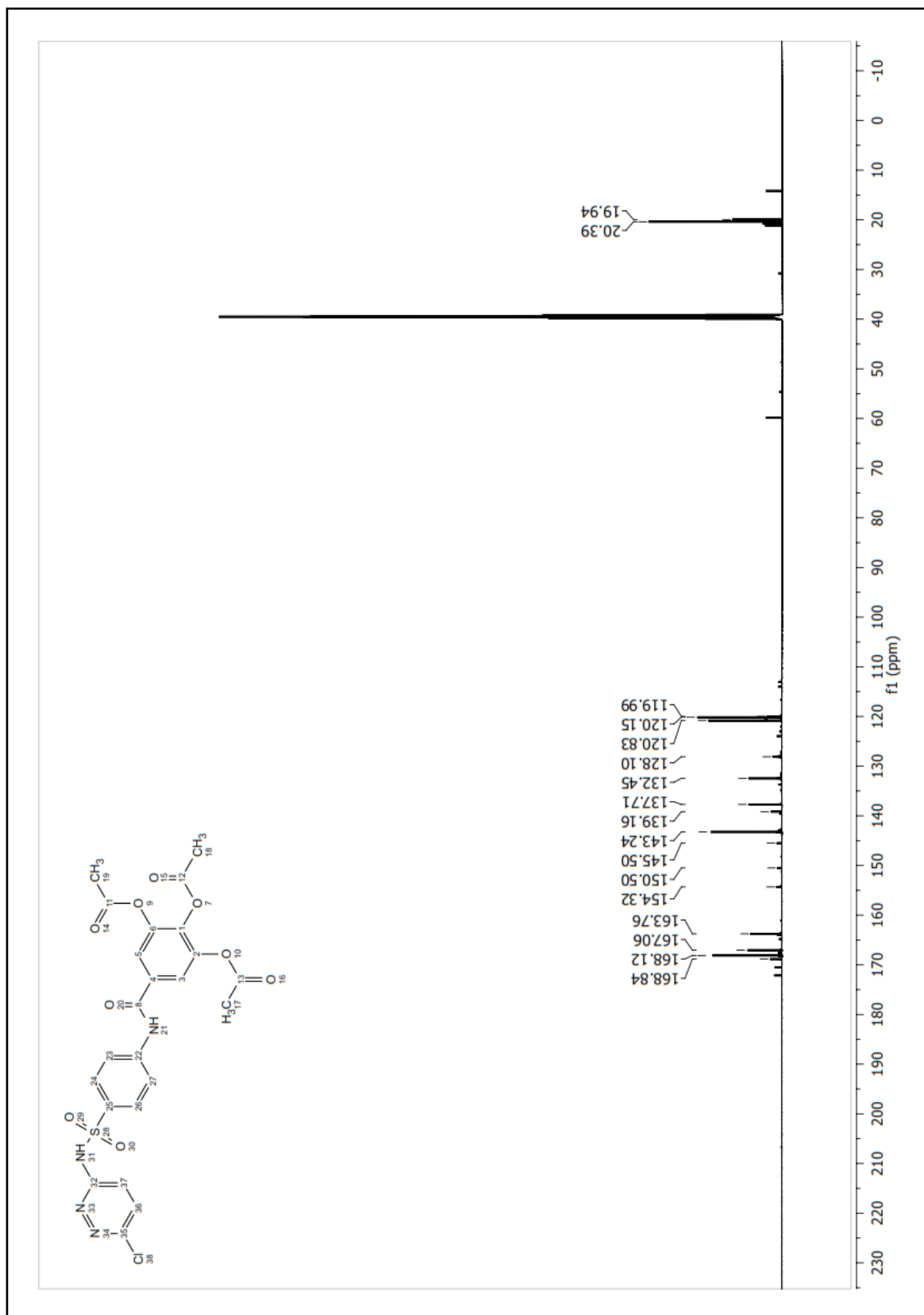
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Formula, min.	C10				
Formula, max.	C19H15ClN4O5SNa				
Measured m/z	469.034	Tolerance	50 ppm	Charge	1
Check Valence	no	Minimum	0	Maximum	0
Nitrogen Rule	no	Electron Configuration	both		
Filter H/C Ratio	no	Minimum	0	Maximum	3
Estimate Carbon	no				



Sum Formula	Sigma	m/z	Err [ppm]	Mean Err [ppm]	Err [mDa]	rdb	N Rule	e <sup>-</sup>
C19H15ClN4O5S1	0.011	469.0344	0.45	0.60	0.21	13.50	ok	even





## Mass Spectrum Molecular Formula Report

### Analysis Info

Analysis Name D:\Data\Taner\G.A. Sulfachloropyridazine.d  
 Method gok\_tune\_wide.m  
 Sample Name  
 Comment

Acquisition Date 4/10/2014 8:01:46 PM

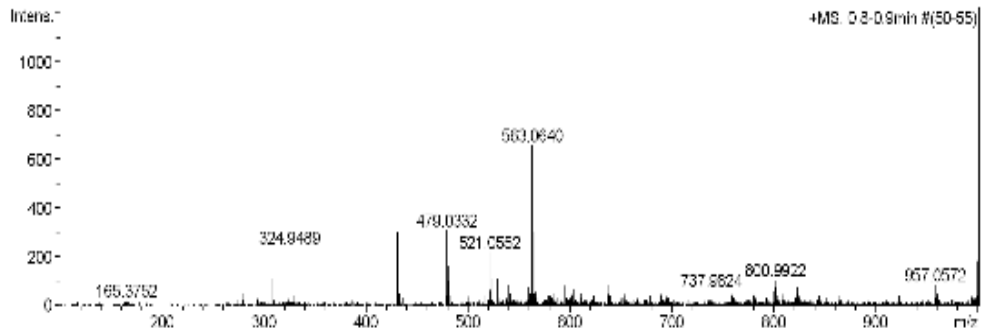
Operator bruker customer  
 Instrument / Ser# micrOTOF-Q 55

### Acquisition Parameter

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Focus	Not active	Set Capillary	5000 V	Set Dry Heater	200 °C
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Scan End	1000 m/z	Set Collision Cell RF	600.0 Vpp	Set Divert Valve	Waste

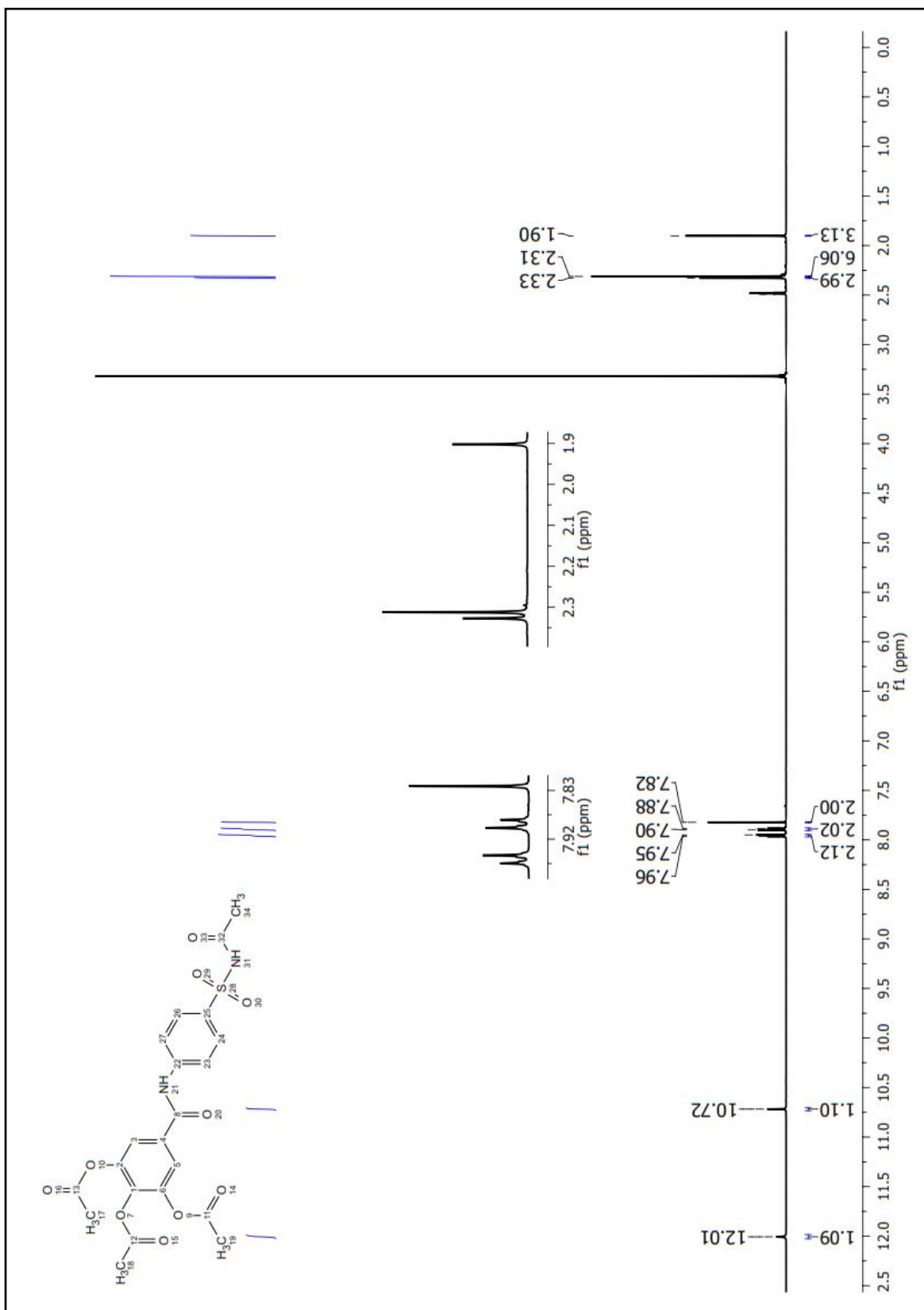
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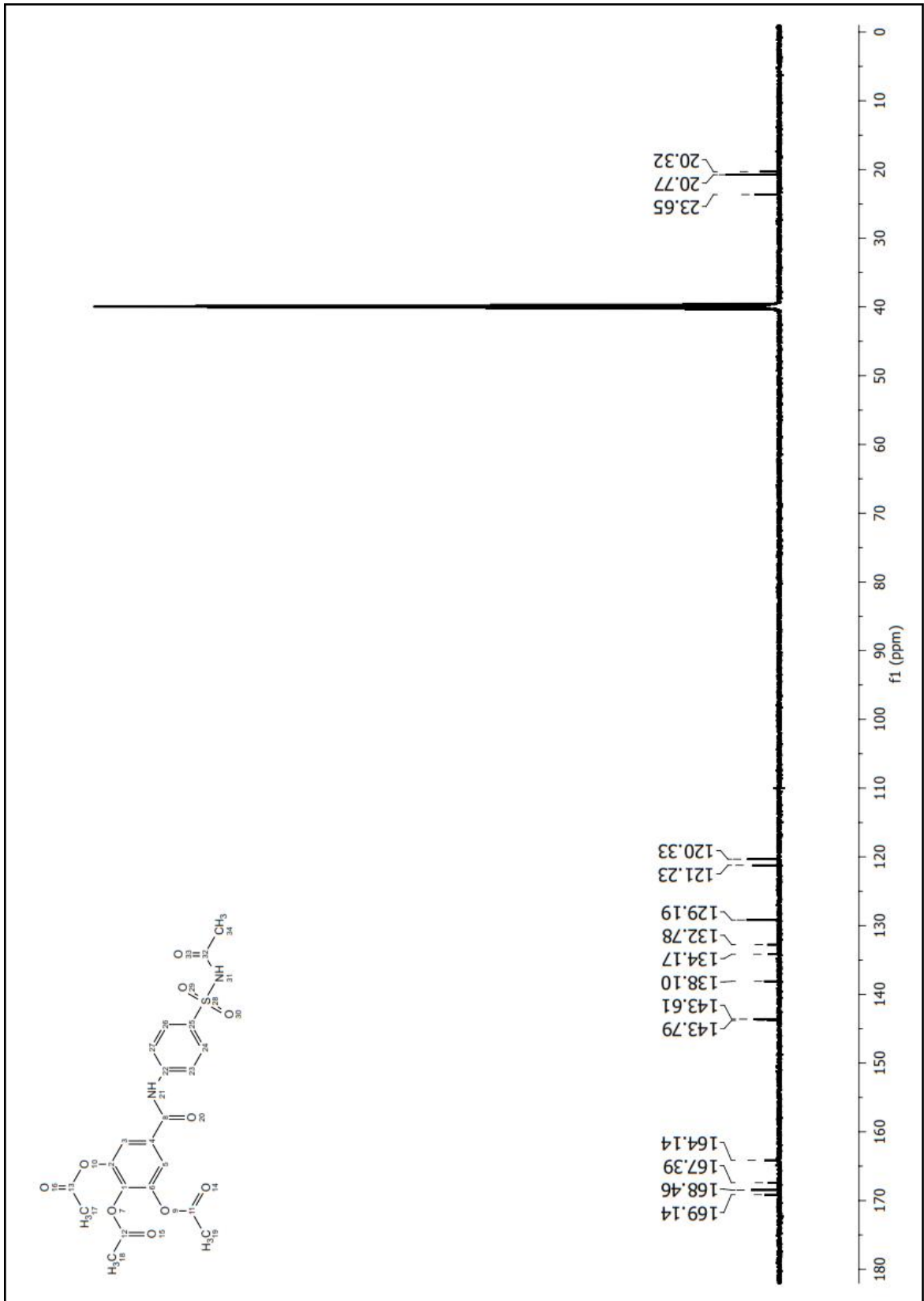
Formula, min.	C19H20Cl1N4O9S1				
Formula, max.					
Measured m/z	563.064	Tolerance	4 ppm	Charge	1
Check Valence	no	Minimum	0	Maximum	0
Nitrogen Rule	no	Electron Configuration both			
Filter H/C Ratio	no	Minimum	0	Maximum	3
Estimate Carbon	yes				



Sum Formula	Sigma	m/z	Err [ppm]	Mean Err [ppm]	Err [mDa]	rdb	N Rule	e <sup>-</sup>
C23H20Cl1N4O9S1	0.032	563.0634	-1.09	9.01	-0.61	15.50	ok	even







## Mass Spectrum Molecular Formula Report

### Analysis Info

Analysis Name D:\Data\Taner\G.A. Sulfacetamide.d  
 Method gok\_tune\_wide.m  
 Sample Name  
 Comment

Acquisition Date 4/10/2014 7:13:38 PM

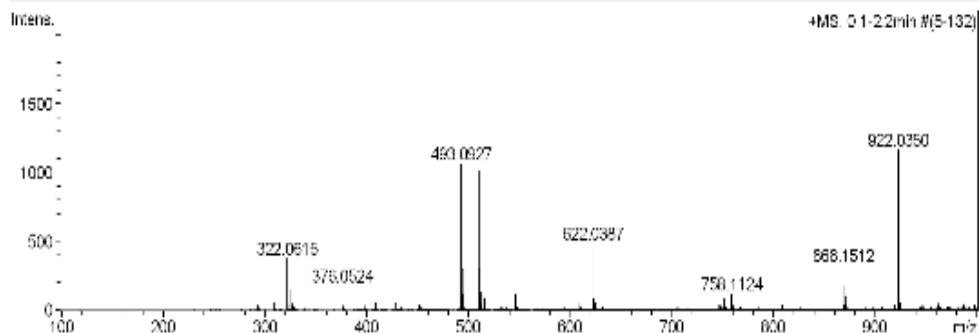
Operator bruker customer  
 Instrument / Ser# micrOTOF-Q 55

### Acquisition Parameter

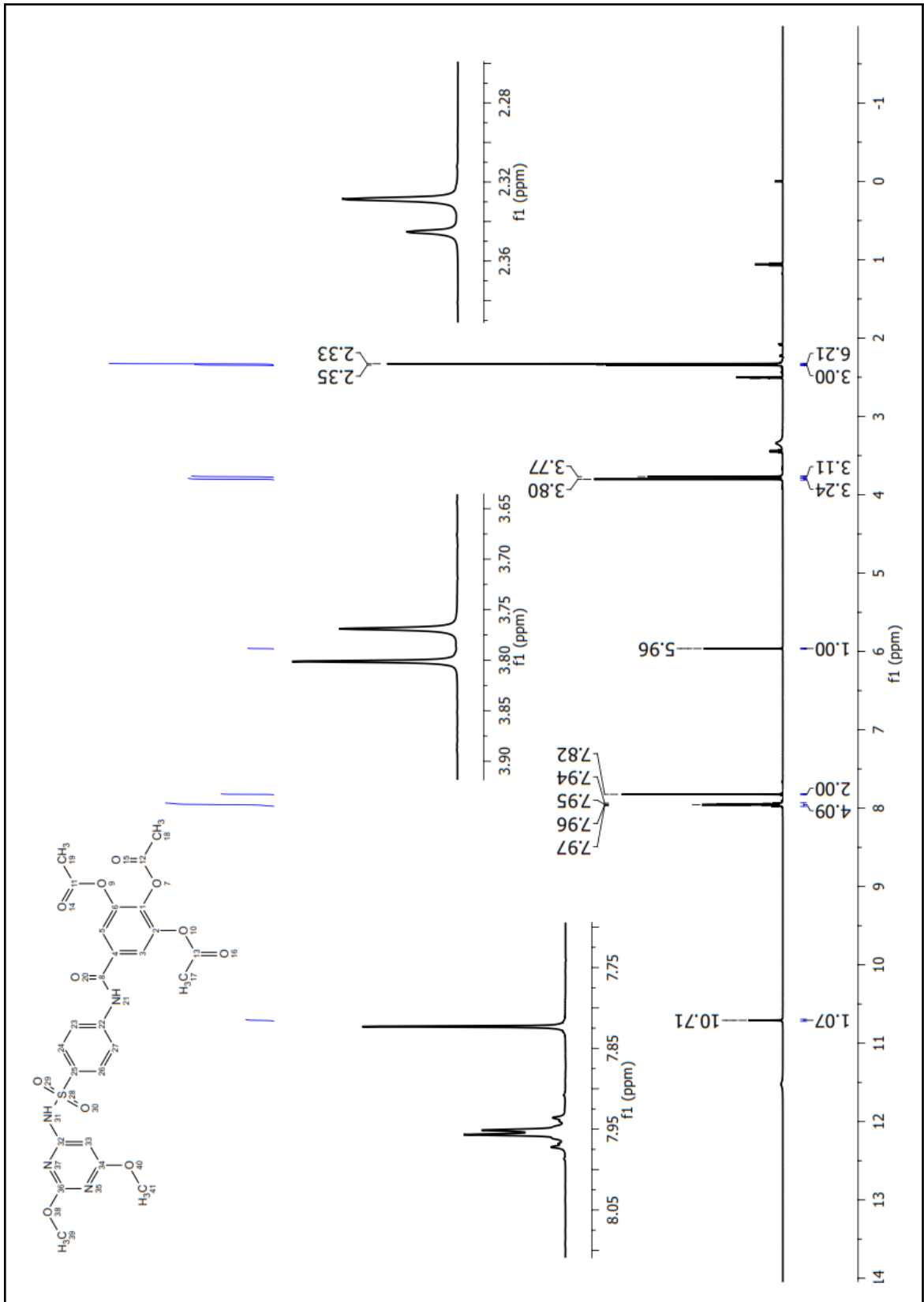
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Focus	Not active	Set Capillary	5000 V	Set Dry Heater	200 °C
Scan Begin	100 m/z	Set End Plate Offset	-400 V	Set Dry Gas	4.0 l/min
Scan End	1000 m/z	Set Collision Cell RF	600.0 Vpp	Set Divert Valve	Waste

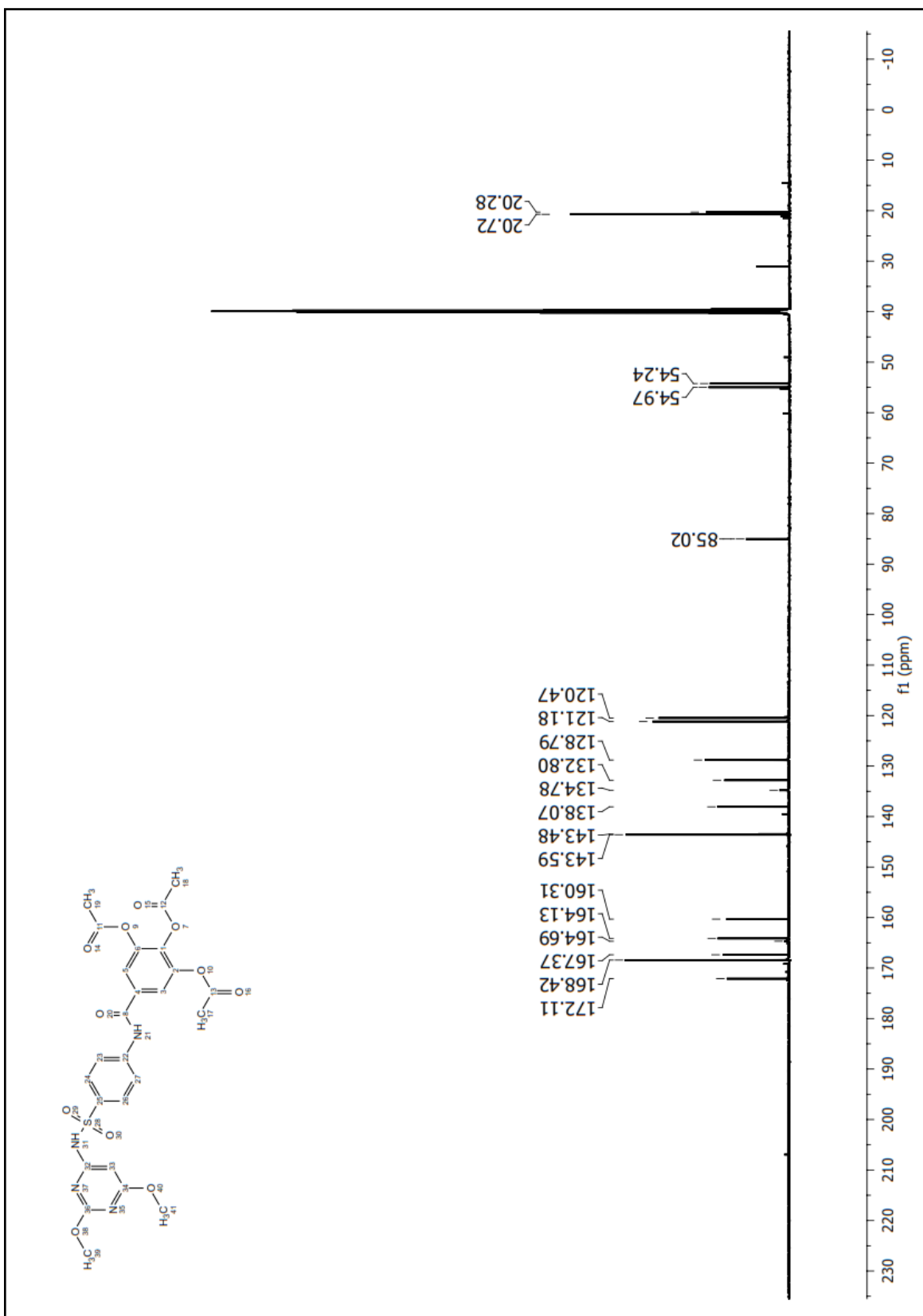
### Generate Molecular Formula Parameter

Formula, min.	C19H20N2O10S1				
Formula, max.					
Measured m/z	493.093	Tolerance	5 ppm	Charge	1
Check Valence	no	Minimum	0	Maximum	0
Nitrogen Rule	no	Electron Configuration both			
Filter H/C Ratio	no	Minimum	0	Maximum	3
Estimate Carbon	yes				



Sum Formula	Sigma	m/z	Err [ppm]	Mean Err [ppm]	Err [mDa]	rdb	N Rule	e <sup>-</sup>
C21H21N2O10S1	0.017	493.0911	-3.16	-3.01	-1.56	12.50	ok	even





## Mass Spectrum Molecular Formula Report

**Analysis Info**

Analysis Name D:\Data\Taner\G.A. Sulfadimethoxine.d  
 Method gok\_tune\_wide.m  
 Sample Name  
 Comment

Acquisition Date 4/11/2014 4:51:57 PM

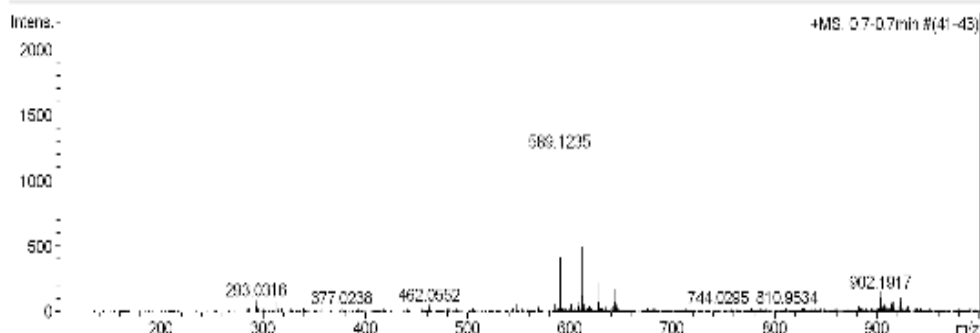
Operator bruker customer  
 Instrument / Ser# micrOTOF-Q 55

**Acquisition Parameter**

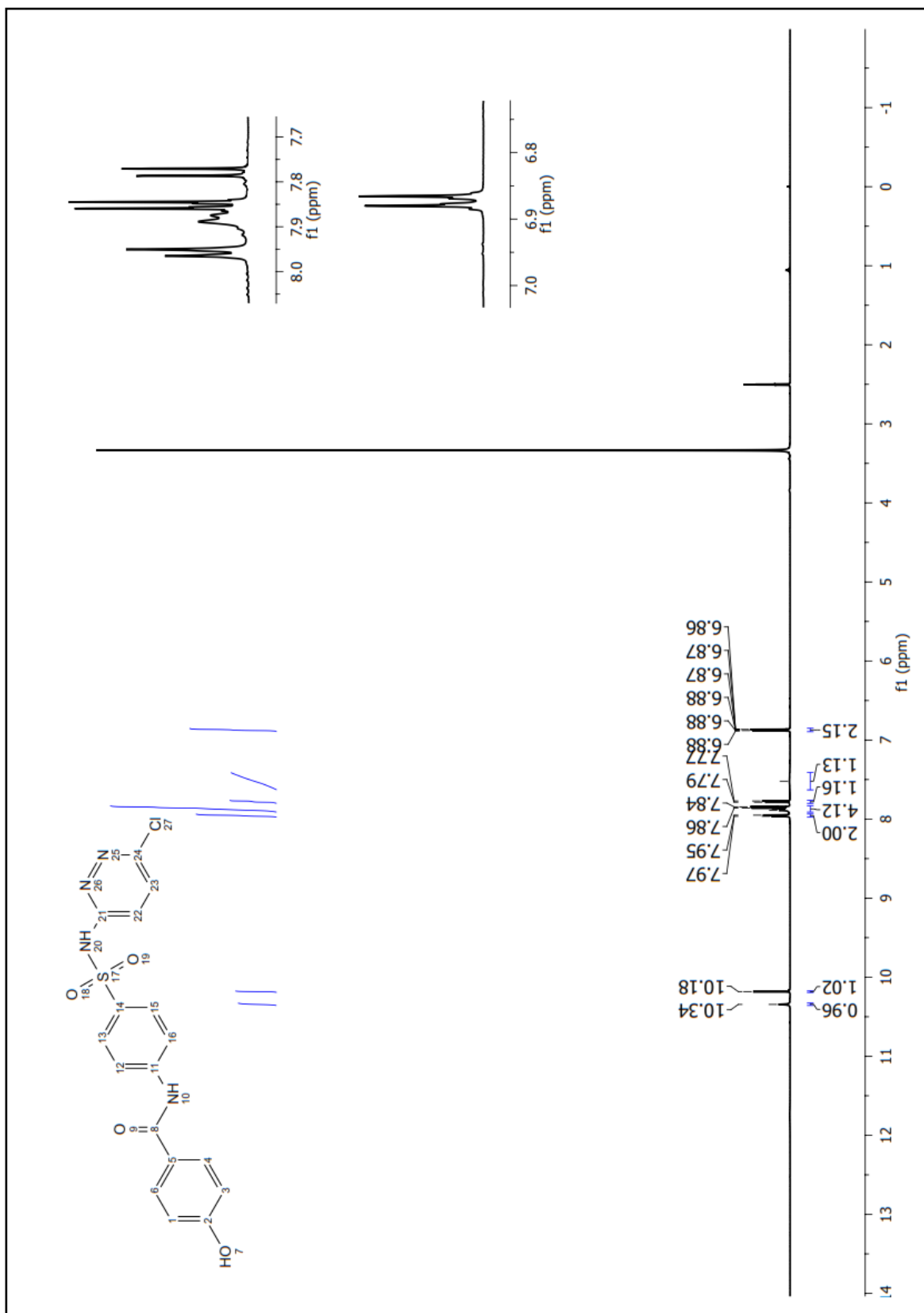
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Scan Begin	100 m/z	Set End Plate Offset	-400 V	Set Dry Gas	4.0 l/min
Scan End	1000 m/z	Set Collision Cell RF	600.0 Vpp	Set Divert Valve	Waste

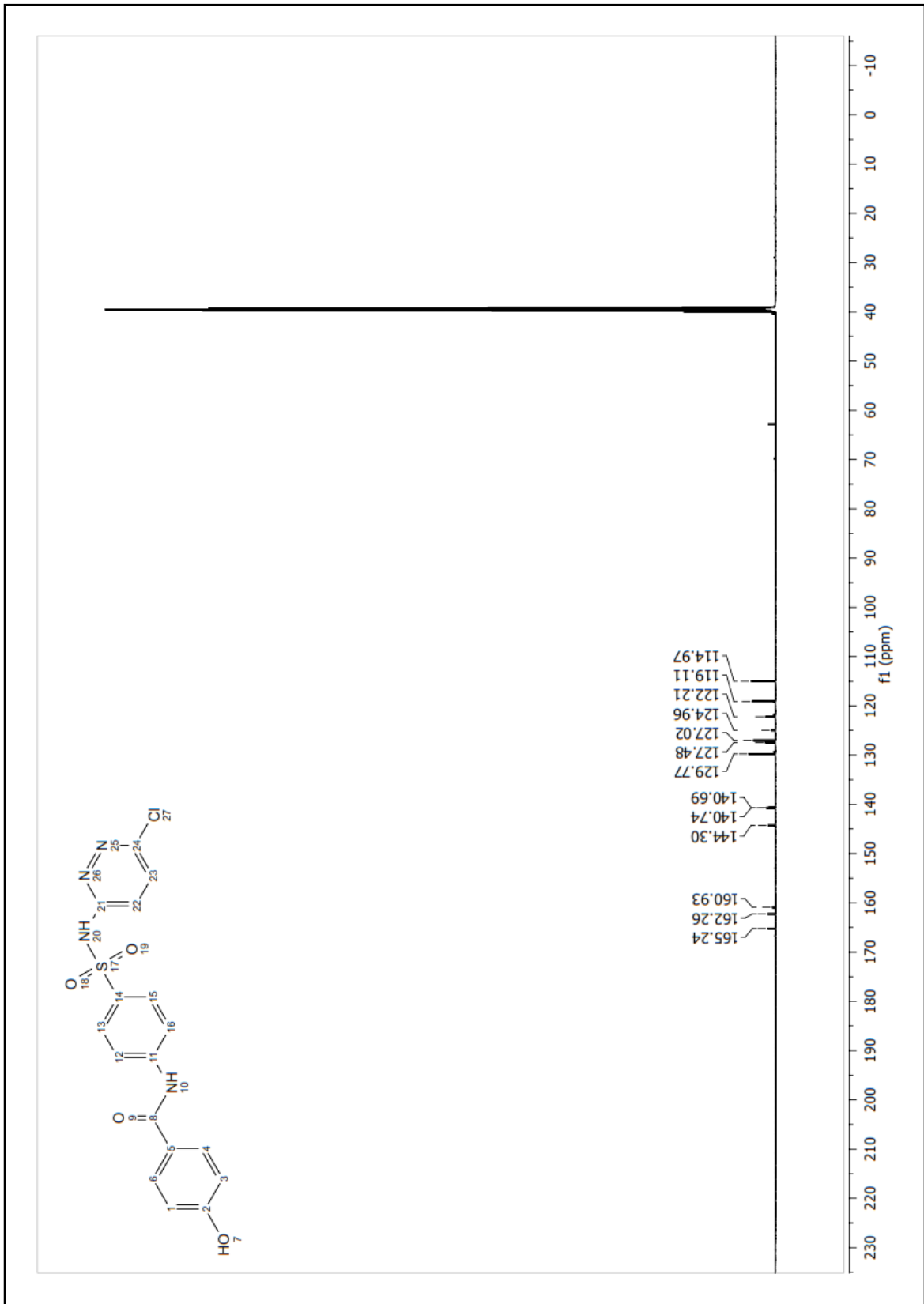
**Generate Molecular Formula Parameter**

Formula, min.	C24H15N3O8S1				
Formula, max.					
Measured m/z	589.124	Tolerance	2 ppm	Charge	1
Check Valence	no	Minimum	0	Maximum	0
Nitrogen Rule	no	Electron Configuration	both		
Filter H/C Ratio	no	Minimum	0	Maximum	3
Estimate Carbon	yes				



Sum Formula	Sigma	m/z	Err [ppm]	Mean Err [ppm]	Err [mDa]	rdb	N Rule	e <sup>-</sup>
C <sub>25</sub> H <sub>25</sub> N <sub>4</sub> O <sub>11</sub> S <sub>1</sub>	0.024	589.1235	0.03	-11.65	0.02	15.50	ok	even







## Mass Spectrum Molecular Formula Report

**Analysis Info**

Analysis Name D:\Data\Taner\4-hba sulfachloropyridazine-2.d  
 Method gok\_tune\_wide.m  
 Sample Name  
 Comment

Acquisition Date 6/6/2014 11:46:42 AM

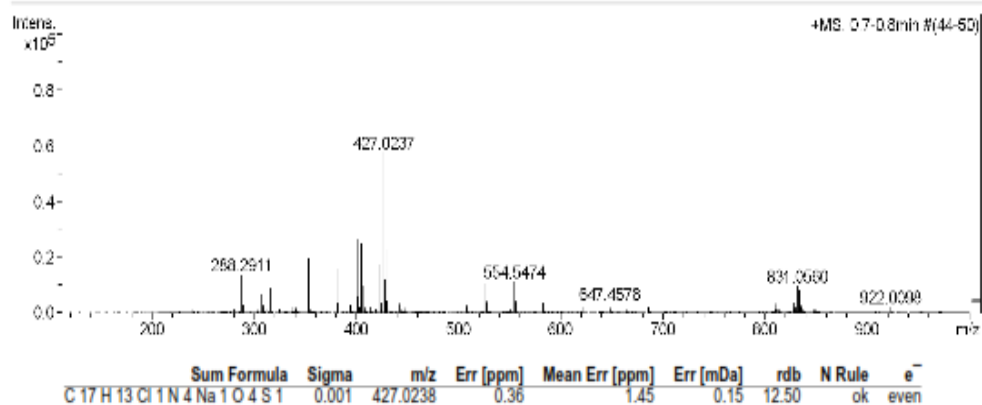
Operator bruker customer  
 Instrument / Ser# micrOTOF-Q 55

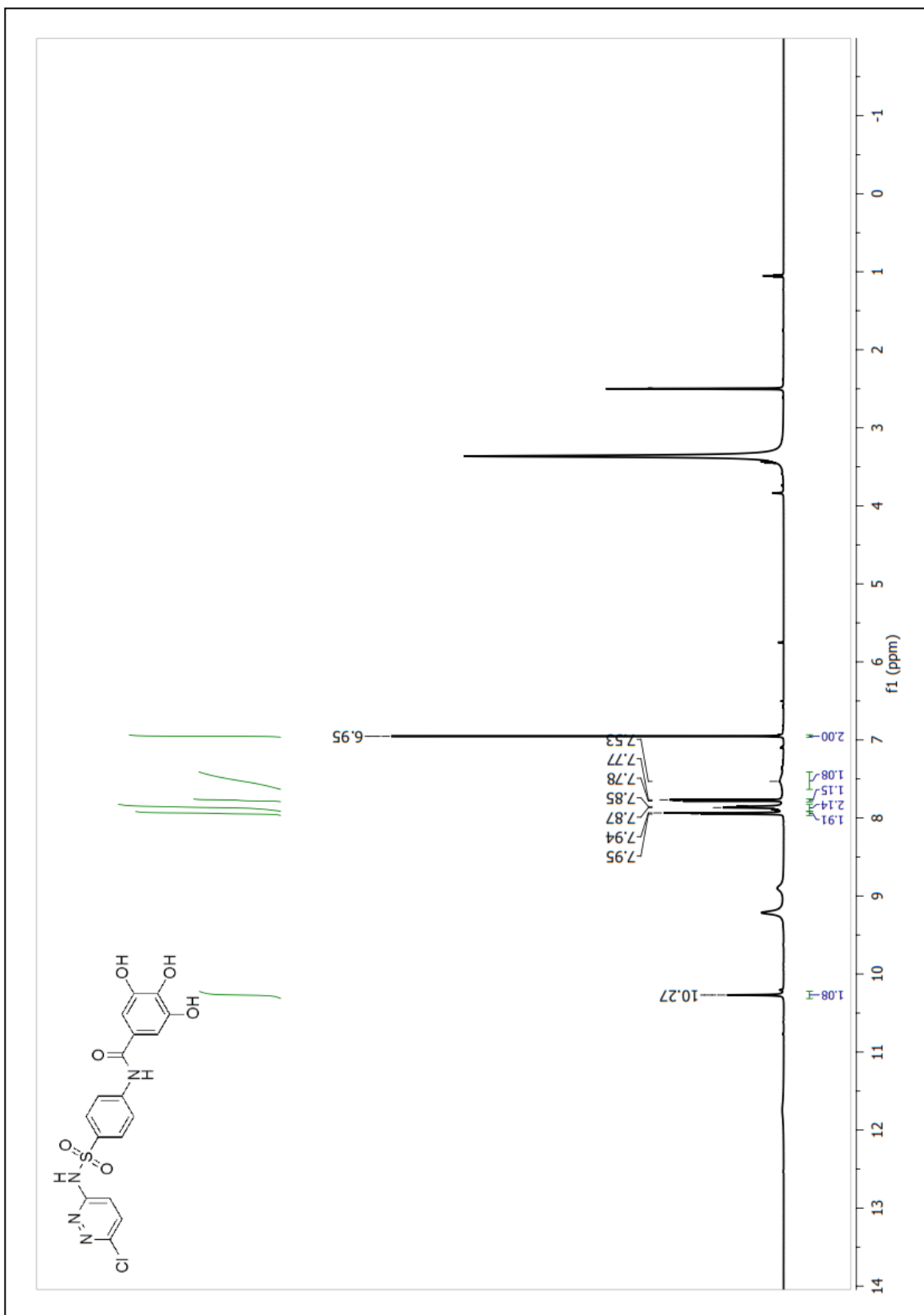
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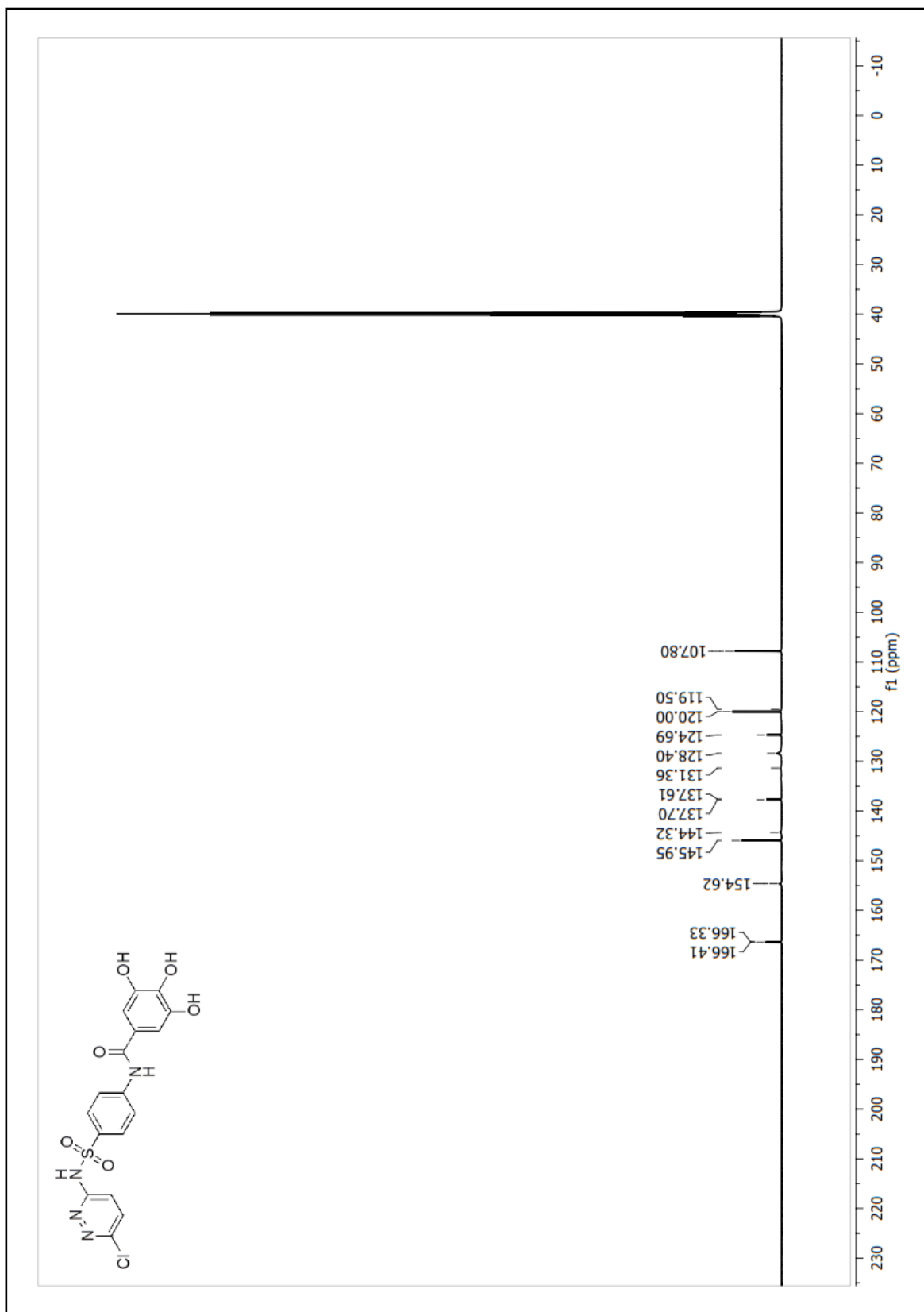
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Focus	Not active	Set Capillary	5000 V	Set Dry Heater	200 °C
Scan Begin	100 m/z	Set End Plate Offset	-400 V	Set Dry Gas	4.0 l/min
Scan End	1000 m/z	Set Collision Cell RF	400.0 Vpp	Set Divert Valve	Waste

**Generate Molecular Formula Parameter**

Formula, min.	C10				
Formula, max.	C17H14ClN4O6SNa				
Measured m/z	427.024	Tolerance	5 ppm	Charge	1
Check Valence	no	Minimum	0	Maximum	0
Nitrogen Rule	no	Electron Configuration	both		
Filter H/C Ratio	no	Minimum	0	Maximum	3
Estimate Carbon	no				







## Mass Spectrum Molecular Formula Report

### Analysis Info

Analysis Name D:\Data\Taner\Gallic sulfachloropyridazine-3.d  
 Method gok\_tune\_wide.m  
 Sample Name  
 Comment

Acquisition Date 6/6/2014 10:12:52 AM

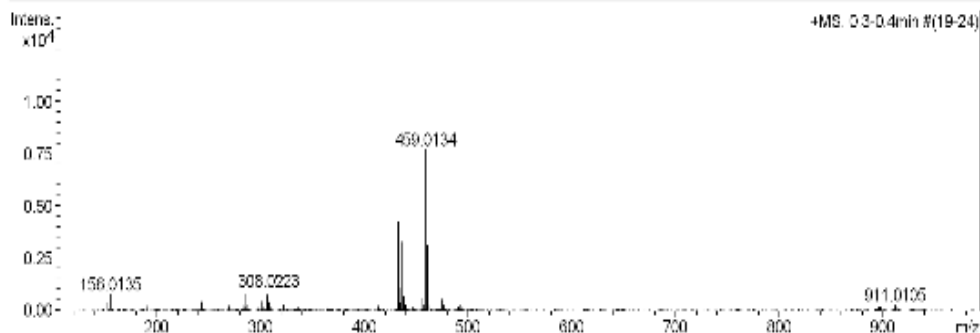
Operator bruker customer  
 Instrument / Ser# micrOTOF-Q 55

### Acquisition Parameter

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Focus	Not active	Set Capillary	5000 V	Set Dry Heater	200 °C
Scan Begin	100 m/z	Set End Plate Offset	-400 V	Set Dry Gas	4.0 l/min
Scan End	1000 m/z	Set Collision Cell RF	300.0 Vpp	Set Divert Valve	Waste

### Generate Molecular Formula Parameter

Formula, min.	C10				
Formula, max.	C17H14ClN4O6SNa				
Measured m/z	459.013	Tolerance	50 ppm	Charge	1
Check Valence	no	Minimum	0	Maximum	0
Nitrogen Rule	no	Electron Configuration	both		
Filter H/C Ratio	no	Minimum	0	Maximum	3
Estimate Carbon	no				



Sum Formula	Sigma	m/z	Err (ppm)	Mean Err (ppm)	Err (mDa)	rdb	N Rule	e <sup>-</sup>
C17H13Cl1N4Na1O6S1	0.004	459.0137	0.46	-0.36	0.21	12.50	ok	even