

## Macrocyclic Peptidomimetics as Inhibitors of Insulin-Regulated Aminopeptidase (IRAP)

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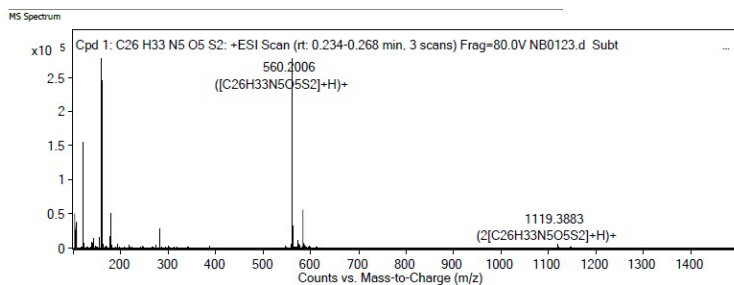
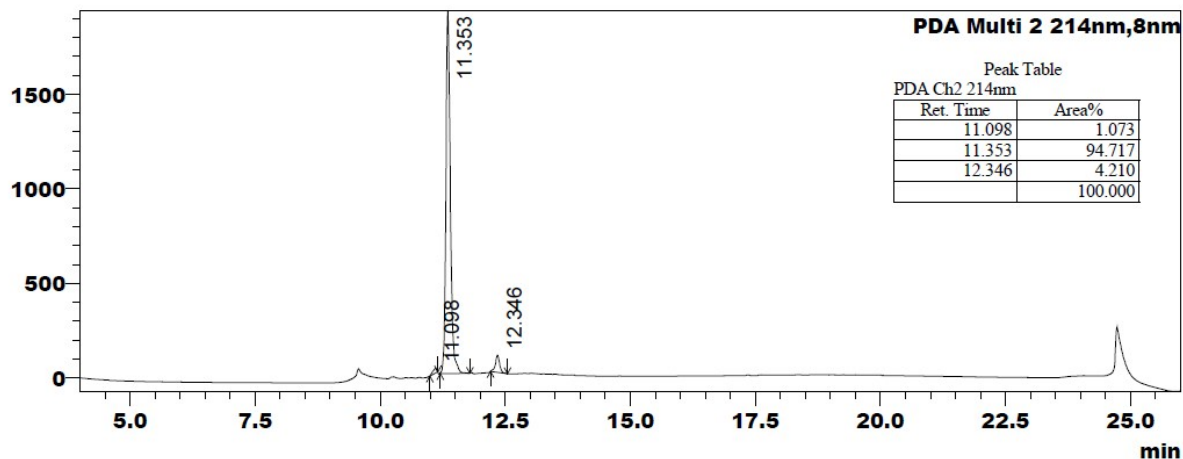
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## Supplementary Information

### LCMS Purity Traces and HRMS for synthesised compounds

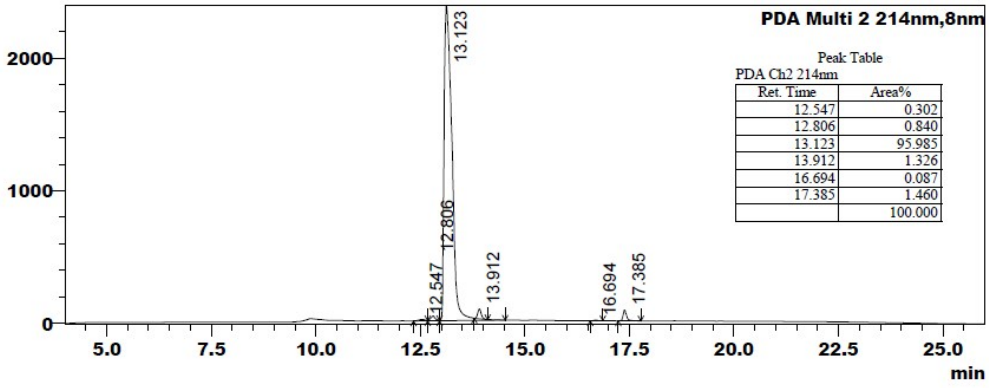
#### Compound 9



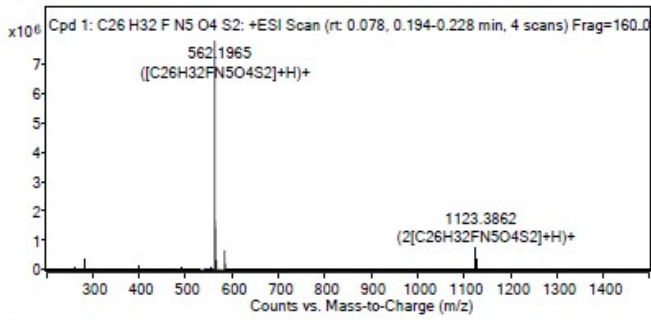
#### MS Spectrum Peak List

m/z	Calc m/z	Diff(ppm)	z	Abund	Formula	Ion
280.6037	280.6034	-0.81	2	28766.27	C <sub>26</sub> H <sub>33</sub> N <sub>5</sub> O <sub>5</sub> S <sub>2</sub>	(M+2H) <sup>2+</sup>
560.2006	560.1996	-1.77	1	278438.05	C <sub>26</sub> H <sub>33</sub> N <sub>5</sub> O <sub>5</sub> S <sub>2</sub>	(M+H) <sup>+</sup>
582.1816	582.1815	-0.07	1	57145.73	C <sub>26</sub> H <sub>33</sub> N <sub>5</sub> O <sub>5</sub> S <sub>2</sub>	(M+Na) <sup>+</sup>

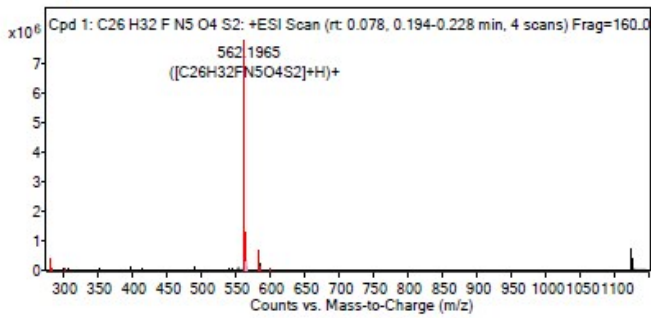
#### Compound 10



MS Spectrum



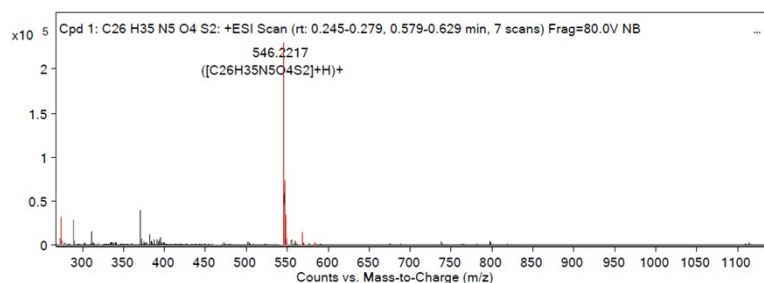
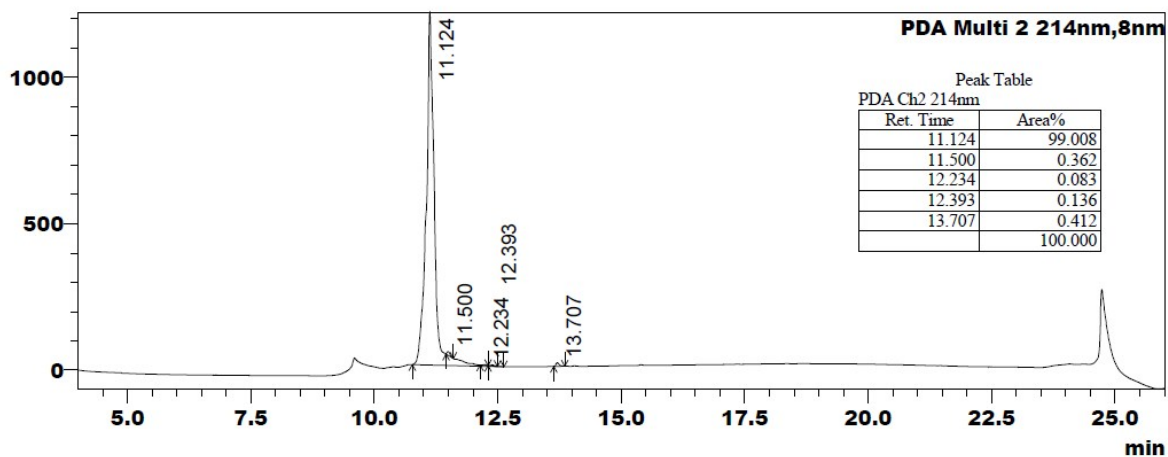
MS Zoomed Spectrum



MS Spectrum Peak List

m/z	Calc m/z	Diff(ppm)	z	Abund	Formula	Ion
562.1965	562.1963	-2.27	1	7967880.29	C <sub>26</sub> H <sub>32</sub> F <sub>N</sub> <sub>5</sub> O <sub>4</sub> S <sub>2</sub>	(M+H) <sup>+</sup>
584.1791	584.1772	-3.31	1	642395.72	C <sub>26</sub> H <sub>32</sub> F <sub>N</sub> <sub>5</sub> O <sub>4</sub> S <sub>2</sub>	(M+Na) <sup>+</sup>
1123.3862	1123.3832	-2.61	1	746551.3	C <sub>26</sub> H <sub>32</sub> F <sub>N</sub> <sub>5</sub> O <sub>4</sub> S <sub>2</sub>	(2M+H) <sup>+</sup>

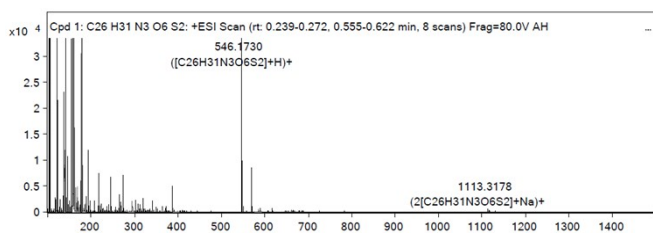
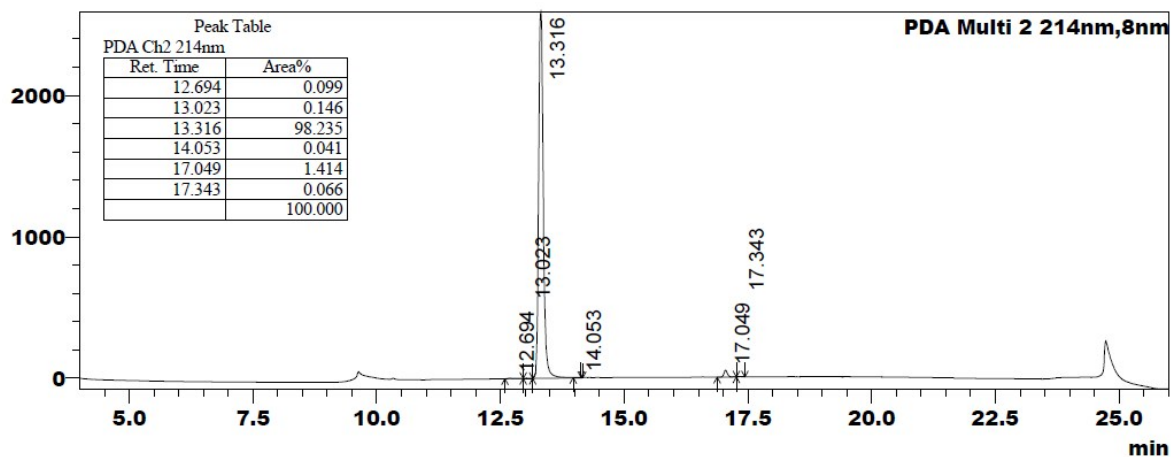
## Compound 11



### MS Spectrum Peak List

m/z	Calc m/z	Diff(ppm)	z	Abund	Formula	Ion
273.6144	273.6138	-2.35	2	31473.86	C <sub>26</sub> H <sub>35</sub> N <sub>5</sub> O <sub>4</sub> S <sub>2</sub>	(M+2H) <sup>+2</sup>
546.2217	546.2203	-2.44	1	230770.49	C <sub>26</sub> H <sub>35</sub> N <sub>5</sub> O <sub>4</sub> S <sub>2</sub>	(M+H) <sup>+</sup>
568.2023	568.2023	-0.05	1	13925.4	C <sub>26</sub> H <sub>35</sub> N <sub>5</sub> O <sub>4</sub> S <sub>2</sub>	(M+Na) <sup>+</sup>

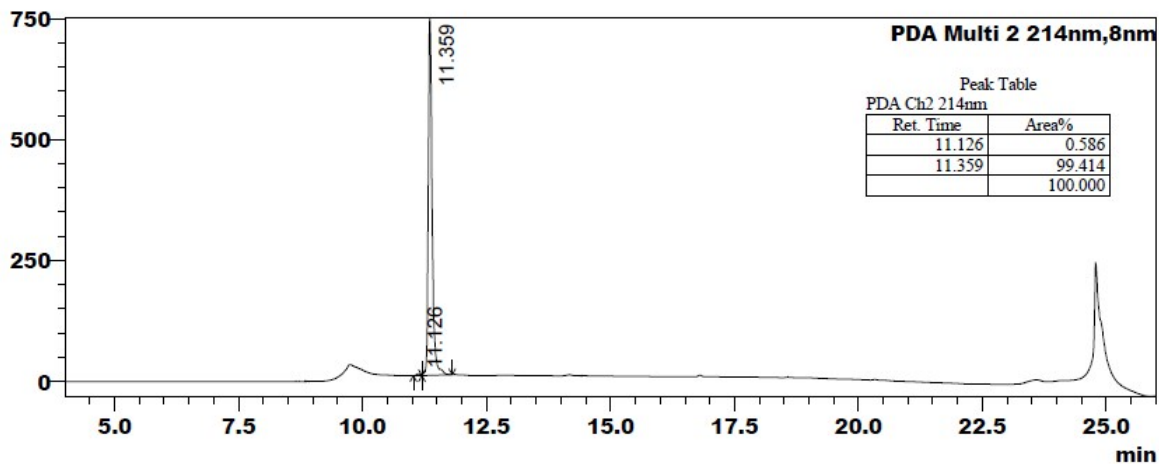
## Compound 12



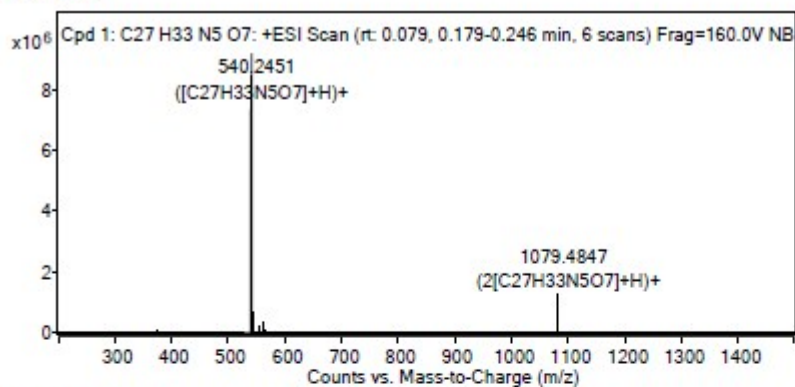
**MS Spectrum Peak List**

m/z	Calc m/z	Diff(ppm)	z	Abund	Formula	Ion
546.173	546.1727	-0.63	1	33867.7	C <sub>26</sub> H <sub>31</sub> N <sub>3</sub> O <sub>6</sub> S <sub>2</sub>	(M+H) <sup>+</sup>
568.1541	568.1546	0.92	1	8447.67	C <sub>26</sub> H <sub>31</sub> N <sub>3</sub> O <sub>6</sub> S <sub>2</sub>	(M+Na) <sup>+</sup>
584.1297	584.1286	-1.99	1	540.21	C <sub>26</sub> H <sub>31</sub> N <sub>3</sub> O <sub>6</sub> S <sub>2</sub>	(M+K) <sup>+</sup>

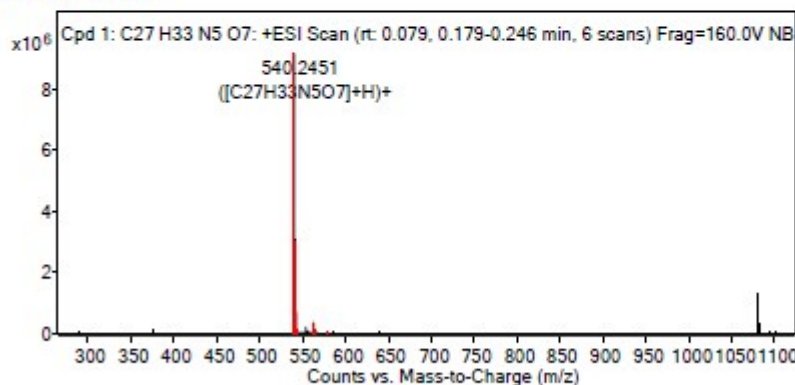
**Compound 13**



**MS Spectrum**



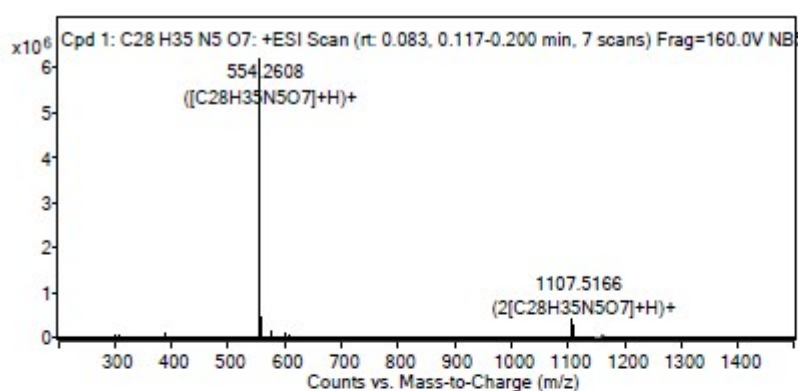
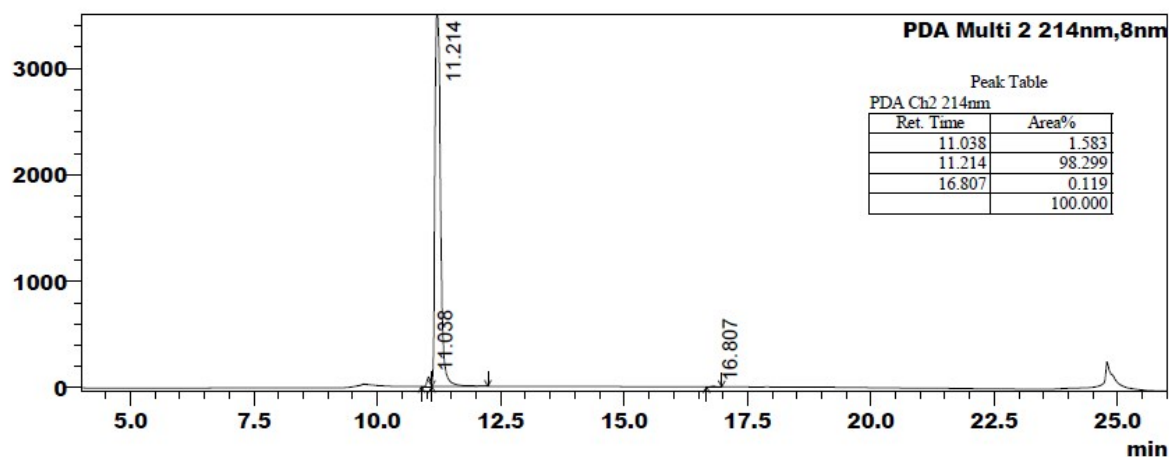
**MS Zoomed Spectrum**



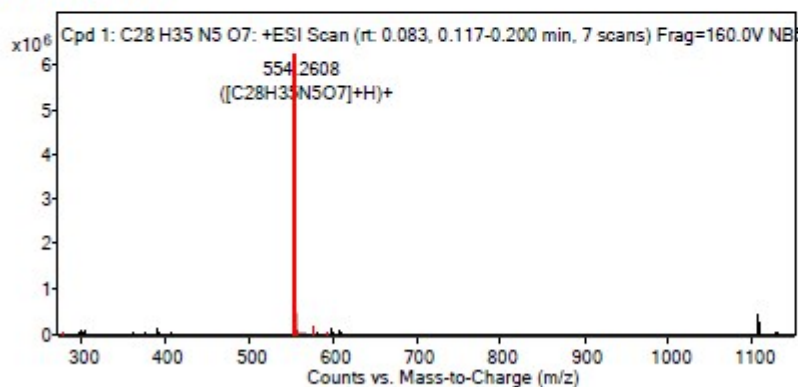
**MS Spectrum Peak List**

m/z	Calc m/z	Diff(ppm)	z	Abund	Formula	Ion
540.2451	540.2453	0.26	1	9333305.53	C <sub>27</sub> H <sub>33</sub> N <sub>5</sub> O <sub>7</sub>	(M+H) <sup>+</sup>
562.2267	562.2272	0.85	1	327982.65	C <sub>27</sub> H <sub>33</sub> N <sub>5</sub> O <sub>7</sub>	(M+Na) <sup>+</sup>
1079.4847	1079.4833	-1.34	1	1290468.76	C <sub>27</sub> H <sub>33</sub> N <sub>5</sub> O <sub>7</sub>	(2M+H) <sup>+</sup>

Compound 14



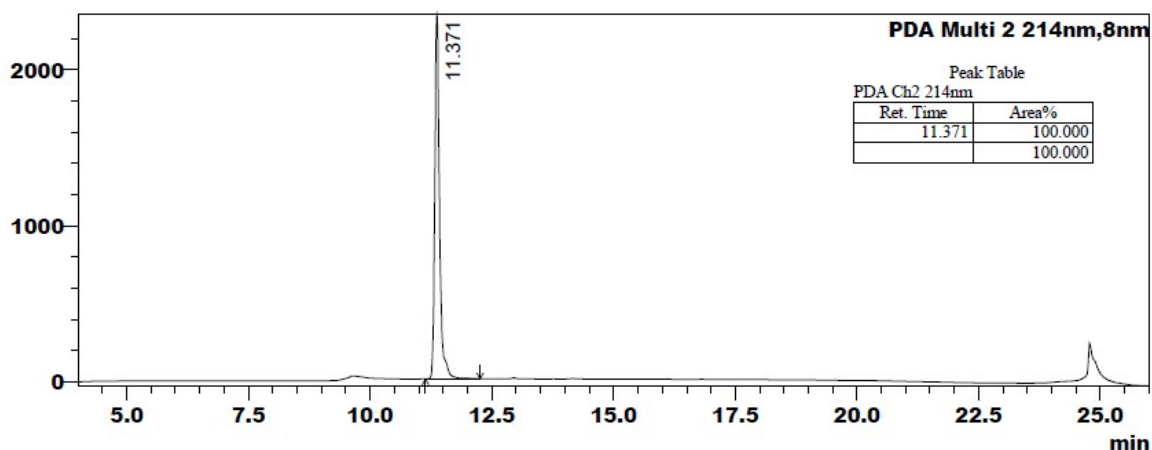
MS Zoomed Spectrum



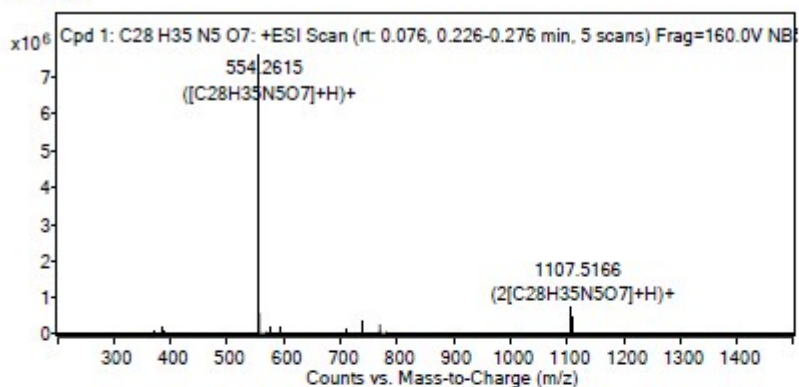
MS Spectrum Peak List

m/z	Calc m/z	Diff (ppm)	z	Abund	Formula	Ion
554.2608	554.2609	0.25	1	6260421.75	C <sub>28</sub> H <sub>35</sub> N <sub>5</sub> O <sub>7</sub>	(M+H) <sup>+</sup>
576.242	576.2429	1.55	1	153497.4	C <sub>28</sub> H <sub>35</sub> N <sub>5</sub> O <sub>7</sub>	(M+Na) <sup>+</sup>
1107.5166	1107.5146	-1.82	1	406200.01	C <sub>28</sub> H <sub>35</sub> N <sub>5</sub> O <sub>7</sub>	(2M+H) <sup>+</sup>

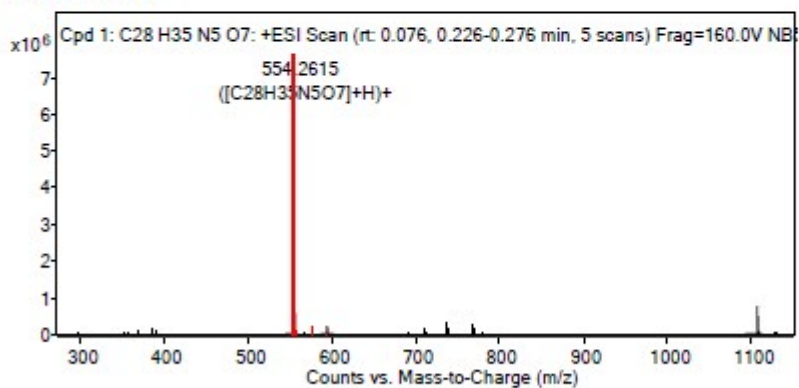
# Compound 15



## MS Spectrum



## MS Zoomed Spectrum



## MS Spectrum Peak List

m/z	Calc m/z	Diff(ppm)	z	Abund	Formula	Ion
554.2615	554.2609	-1.03	1	7685119.87	C <sub>28</sub> H <sub>35</sub> N <sub>5</sub> O <sub>7</sub>	(M+H) <sup>+</sup>
576.243	576.2429	-0.15	1	203790.19	C <sub>28</sub> H <sub>35</sub> N <sub>5</sub> O <sub>7</sub>	(M+Na) <sup>+</sup>
1107.5166	1107.5146	-1.85	1	760350	C <sub>28</sub> H <sub>35</sub> N <sub>5</sub> O <sub>7</sub>	(2M+H) <sup>+</sup>