

**T. section longibrachiatum MMS 147**

**Tableau 9 : séquences, masses moléculaires, masse des adduits Na, des ions bichargés, noms et analogie des peptaïbols identifiés chez la souche MMS 147**

Position		Partie N terminale												Partie C terminale H+								Mw	[M+Na] <sup>+</sup>	[M+2Na] <sup>2+/2</sup>	Nom commun
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20				
Fraction 1	peptide 1*	Ac-U	A	A	U	A	A	Q	U	V	U	G	L	U	P	V	U	U	Q	Q	FOH	1922	1945	984	Nouveau
		128	199	270	355	426	497	625	710	809	894	951	1064	1149	98	197	282	367	495	623	774				anal. Trichokonine IIc
Fraction 2	peptide 2*	Ac-U	A	A	A	U	Q	U	V	U	G	L	U		P	V	U	U	Q	Q	FOH	1851	1874	948,5	Nouveau
		128	199	270	341	426	554	639	738	823	880	993	1078		98	197	282	367	495	623	774				anal. Trichokonine V
Fraction 2	peptide 3*	Ac-U	A	U	A	U	Q	U	V	U	G	V	U		P	V	U	U	Q	Q	FOH	1851	1874	948,5	Nouveau
		128	199	284	355	440	568	653	752	837	894	993	1078		98	197	282	367	495	623	774				anal. Trichokonine V
Fraction 3	peptide 4	Ac-U	A	U	A	U	A	Q	U	V	U	G	L	U	P	V	U	U	Q	Q	FOH	1936	1959	991	Trichokonine VI
		128	199	284	355	440	511	639	724	823	908	965	1078	1163	98	197	282	367	495	623	774				
Fraction 3	peptide 5	Ac-U	A	U	A	U	Q	U	V	U	G	L	U		P	V	U	U	Q	Q	FOH	1865	1888	955,6	Trichokonine V
		128	199	284	355	440	568	653	752	837	894	1007	1092		98	197	282	367	495	623	774				
Fraction 4	peptide 6	Ac-U	A	U	A	U	U	Q	U	V	U	G	L	U	P	V	U	U	Q	Q	FOH	1950	1973	998	Trichokonine VIII
		128	199	284	355	440	525	653	738	837	922	979	1092	1177	98	197	282	367	495	623	774				
Fraction 4	peptide 7	Ac-U	A	U	A	U	A	Q	U	V	U	G	L	U	P	V	U	V	Q	Q	FOH	1950	1973	998	Trichokonine VII
		128	199	284	355	440	511	639	724	823	908	965	1078	1163	98	197	282	381	509	637	788				

\* Nouvelle molécule

**Fractions CLHP**

Site de coupure

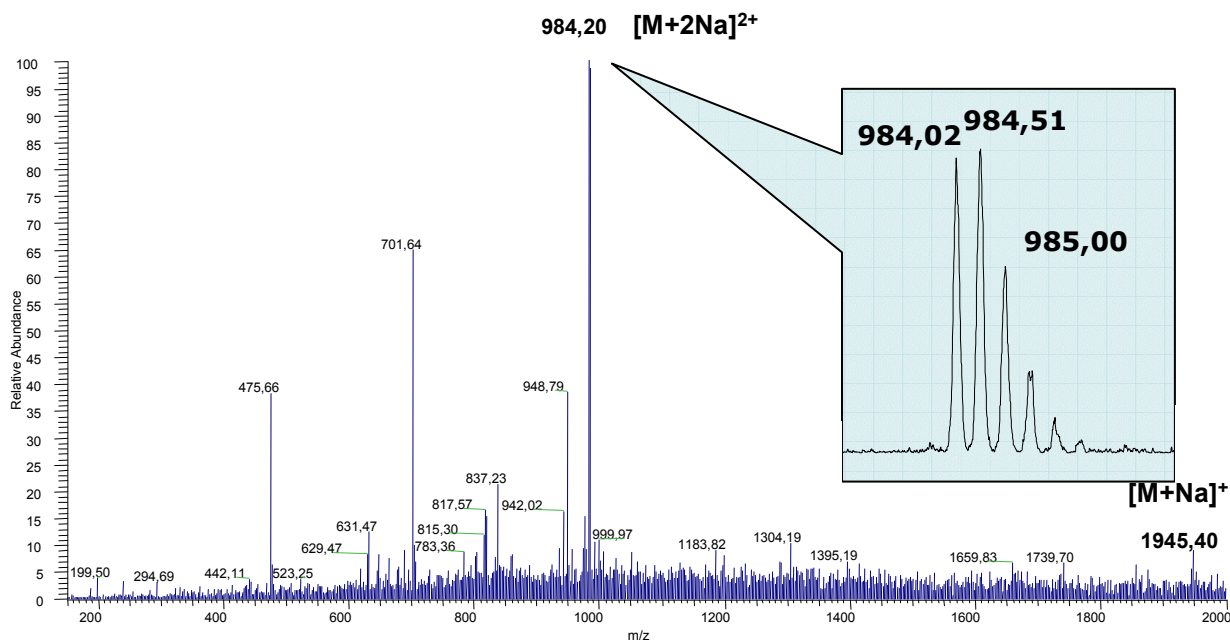
Masse moléculaire

**Souche *Trichoderma* section *longibrachiatum* MMS 147**

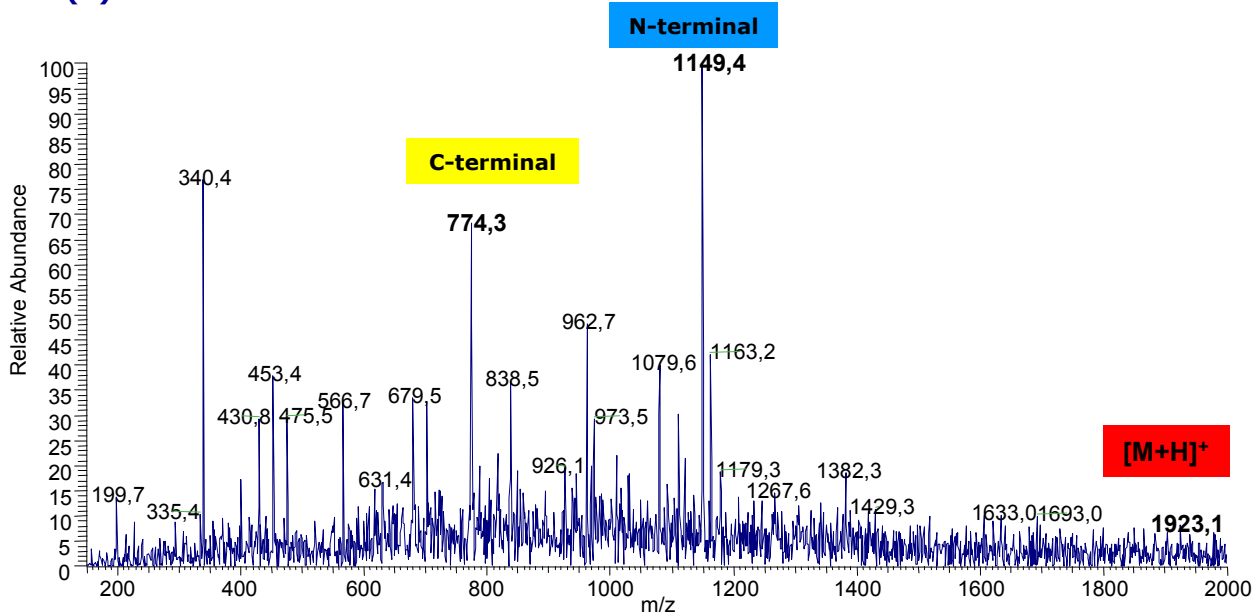
**Peptide 1**

Ac-U	A	A	U	A	A	Q	U	V	U	G	L	U	P	V	U	U	Q	Q	FOH
128	199	270	355	426	497	625	710	809	894	951	1064	1149	98	197	282	367	495	623	774

**(a) Fraction HPLC 1 sans TFA Full scan**



**(b) Fraction HPLC 1 + TFA Full scan**

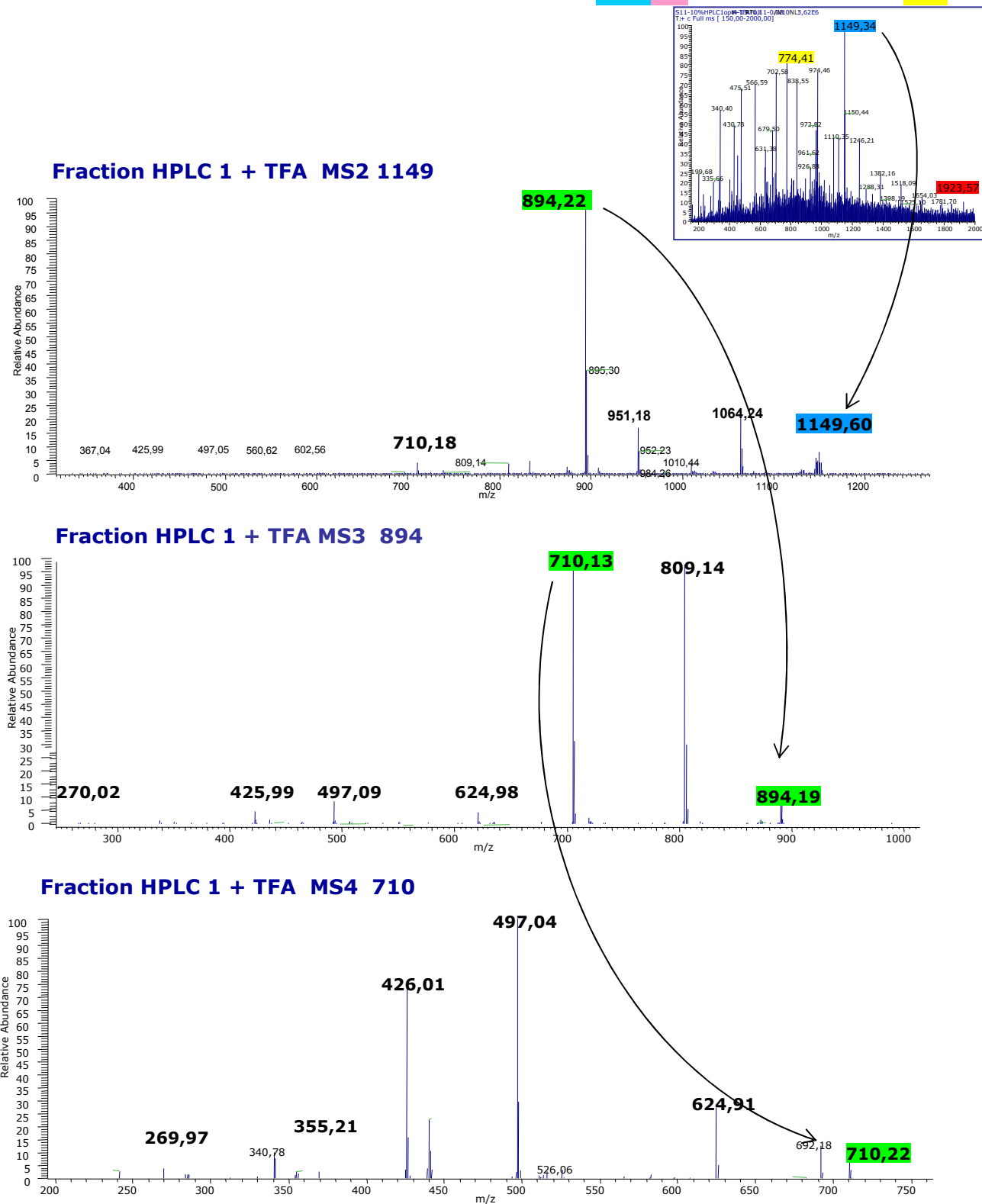


**Fig. 49 : Spectres SM en mode « full-scan » sans (a) et avec TFA (b) du peptide 1 de la souche MMS 147.**

**Souche *Trichoderma section longibrachiatum* MMS 147**

**Peptide 1**

Ac-U A A U A A Q U V U G L U P V U U Q Q FOH  
 128 199 270 355 426 497 625 710 809 894 951 1064 1149 98 197 282 367 495 623 774



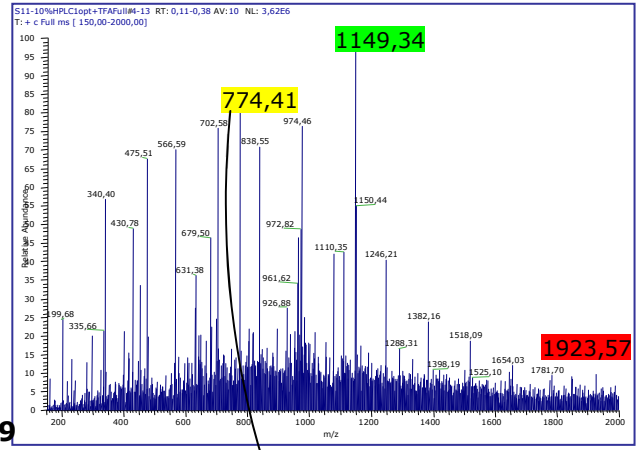
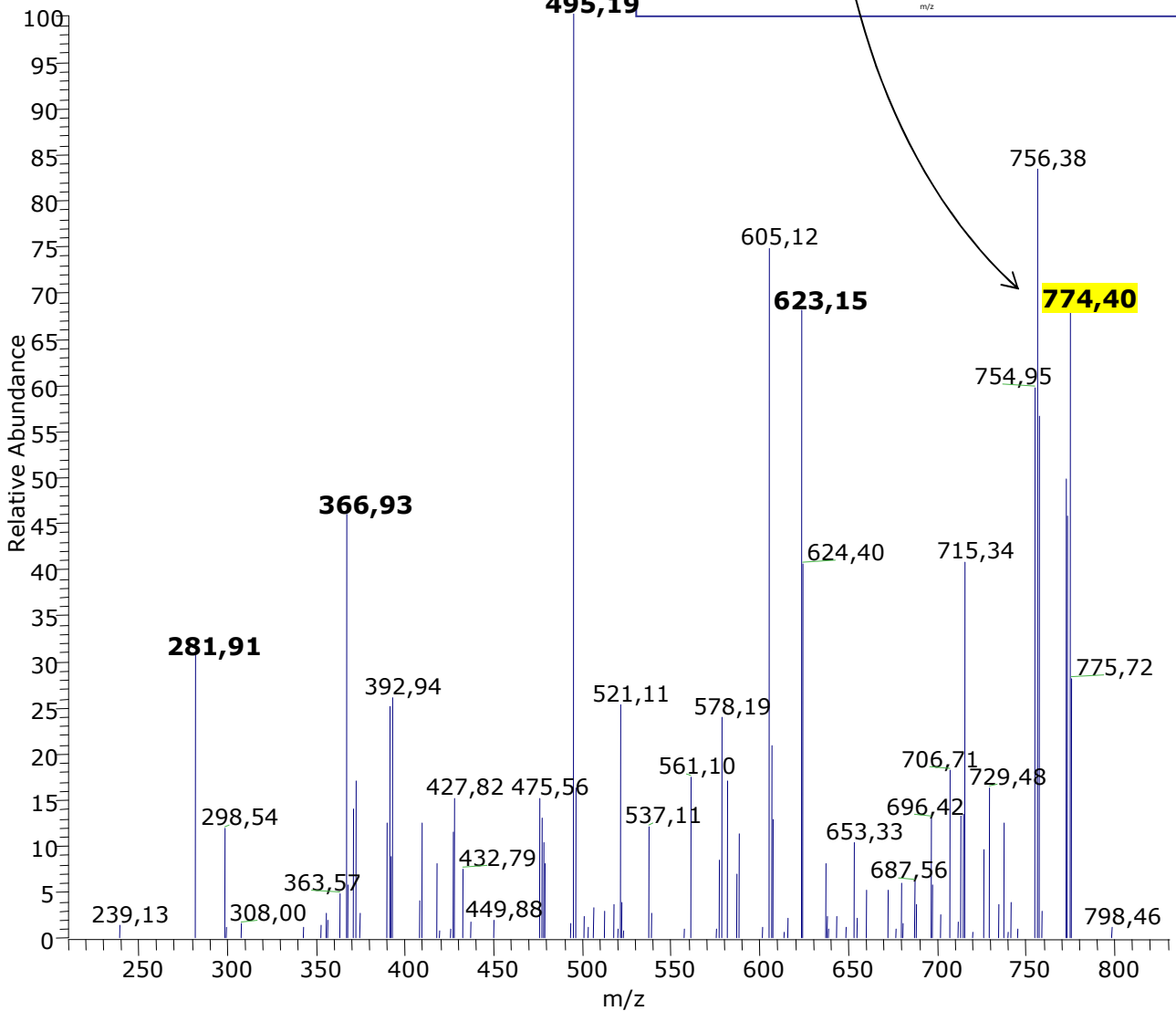
**Fig. 50 : Spectres SM<sup>n</sup> de la partie N-terminale du peptide 1 de la souche MMS 147.**

**Souche *Trichoderma* section *longibrachiatum* MMS 147**

**Peptide 1**

Ac-U	A	A	U	A	A	Q	U	V	U	G	L	U	P	V	U	U	Q	Q	FOH
128	199	270	355	426	497	625	710	809	894	951	1064	1149	98	197	282	367	495	623	774

**Fraction HPLC 1 + TFA MS2 774**



**Fig. 51 : Spectres SM<sup>n</sup> de la partie C-terminale du peptide 1 de la souche MMS 147.**

**Souche *Trichoderma* section *longibrachiatum* MMS 147**

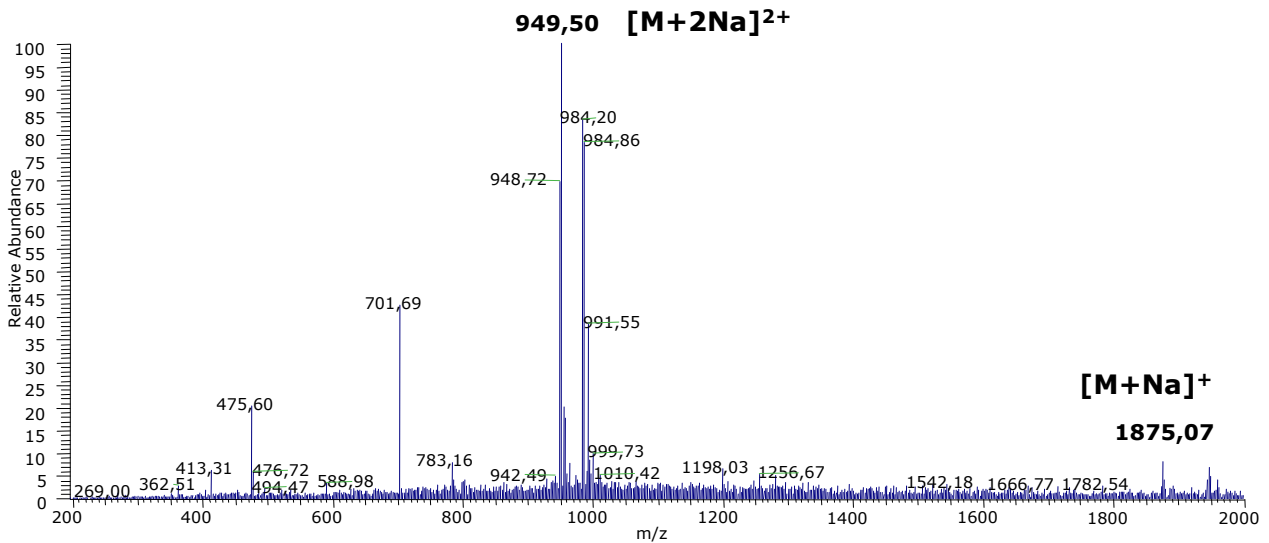
**Peptide 2**

Ac-U	A	<b>A</b>	A	U	Q	U	V	U	G	L	U	<b>P</b>	V	U	U	Q	Q	FOH
128	199	270	341	426	554	639	738	823	880	993	1078	98	197	282	367	495	623	774

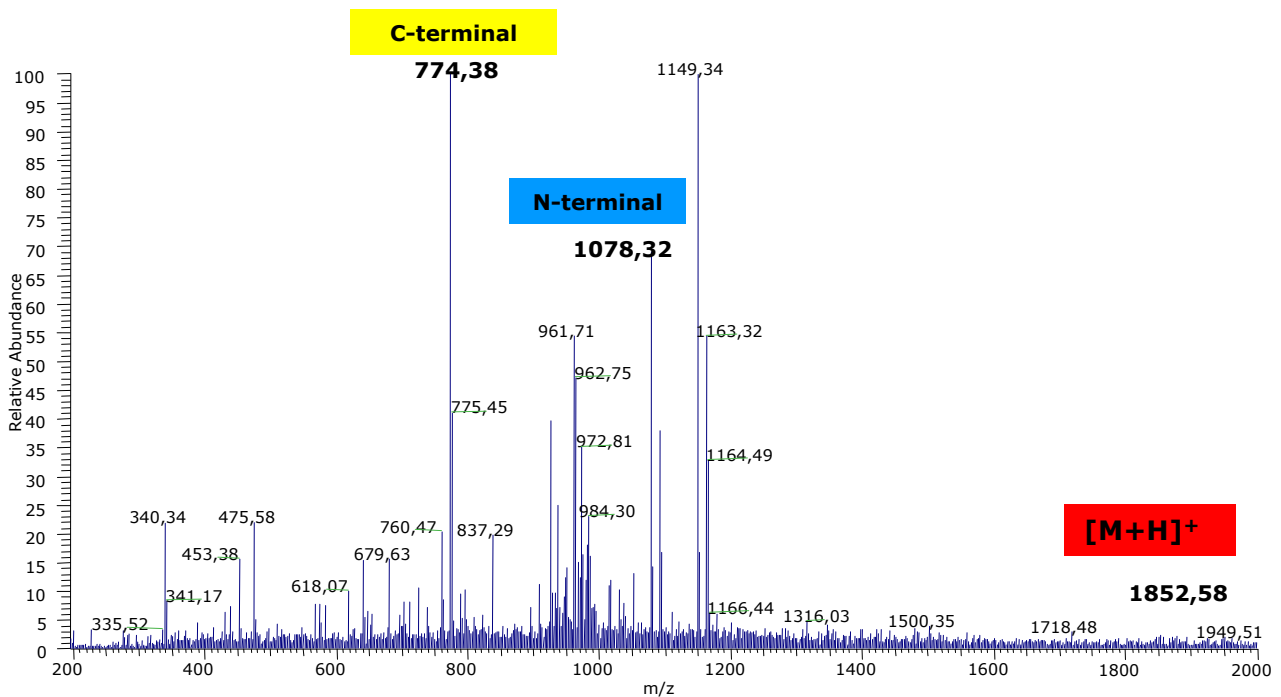
**Peptide 3**

Ac-U	A	<b>U</b>	A	U	Q	U	V	U	G	<b>V</b>	U	<b>P</b>	V	U	U	Q	Q	FOH
128	199	284	355	440	568	653	752	837	894	993	1078	98	197	282	367	495	623	774

**(a) Fraction HPLC 2 sans TFA Full scan**



**(b) Fraction HPLC 2 + TFA Full scan**

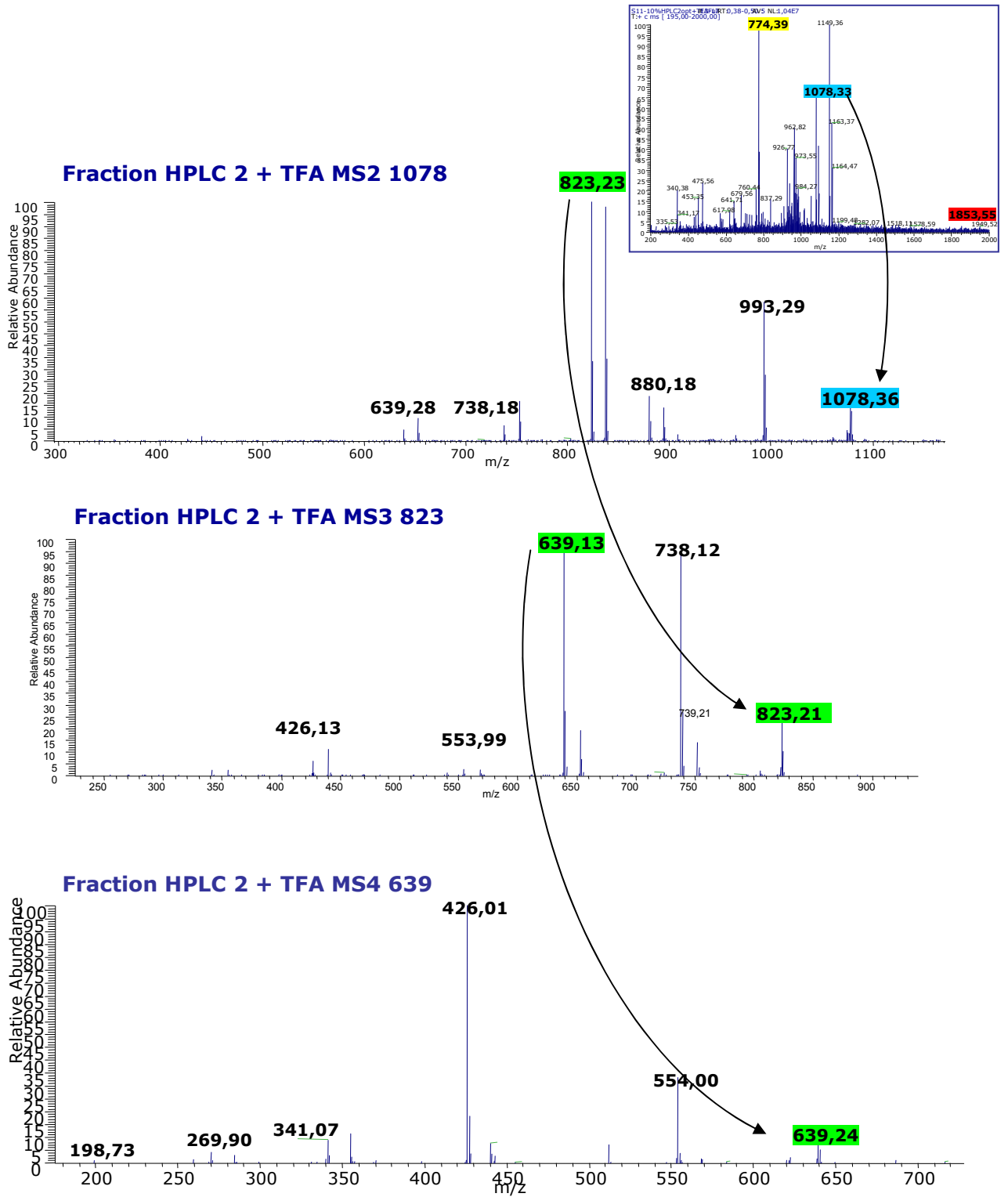


**Fig. 52 : Spectres SM en mode « full-scan » sans (a) et avec TFA (b) du peptide 2 et 3 de la souche MMS 147.**

**Souche *Trichoderma* section *longibrachiatum* MMS 147**

**Peptide 2**

Ac-U	A	A	A	U	Q	U	V	U	G	L	U	P	V	U	U	Q	Q	FOH
128	199	270	341	426	554	639	738	823	880	993	1078	98	197	282	367	495	623	774

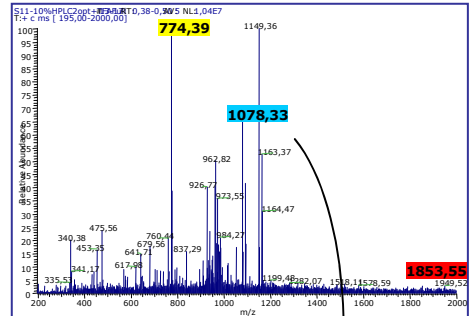


**Fig. 53 : Spectres SM<sup>n</sup> de la partie N-terminale du peptide 2 de la souche MMS 147.**

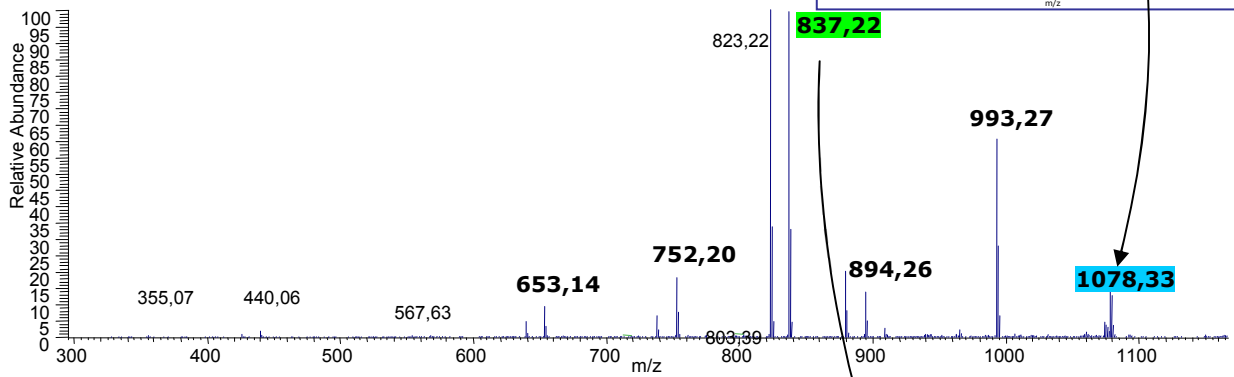
**Souche *Trichoderma* section *longibrachiatum* MMS 147**

**Peptide 3**

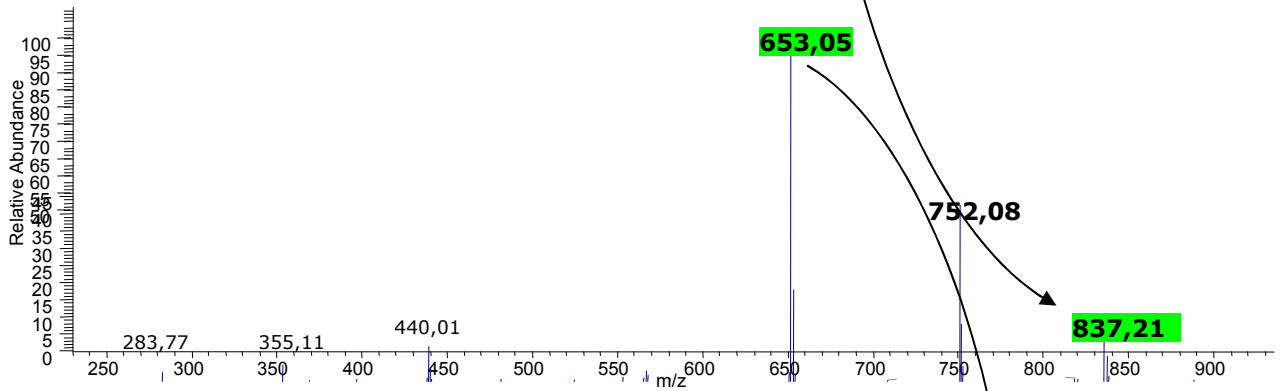
Ac-U	A	U	A	U	Q	U	V	U	G	V	U	P	V	U	U	Q	Q	FOH
128	199	284	355	440	568	653	752	837	894	993	1078	97	196	282	367	495	623	774



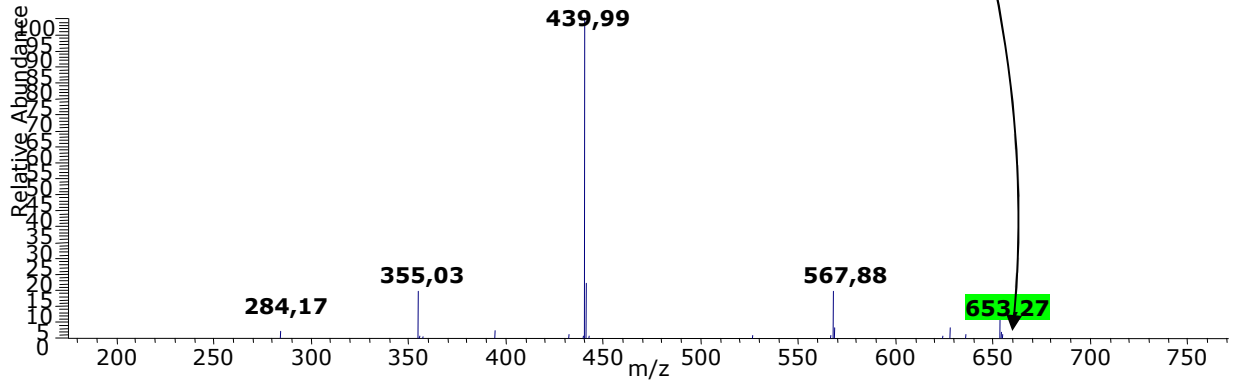
**Fraction HPLC 2 + TFA MS2 1078**



**Fraction HPLC 2 + TFA MS3 837**



**Fraction HPLC 2 + TFA MS4 653**



**Fig. 54 : Spectres SM<sup>n</sup> de la partie N-terminale du peptide 3 de la souche MMS 147.**

**Souche *Trichoderma* section *longibrachiatum* MMS 147**

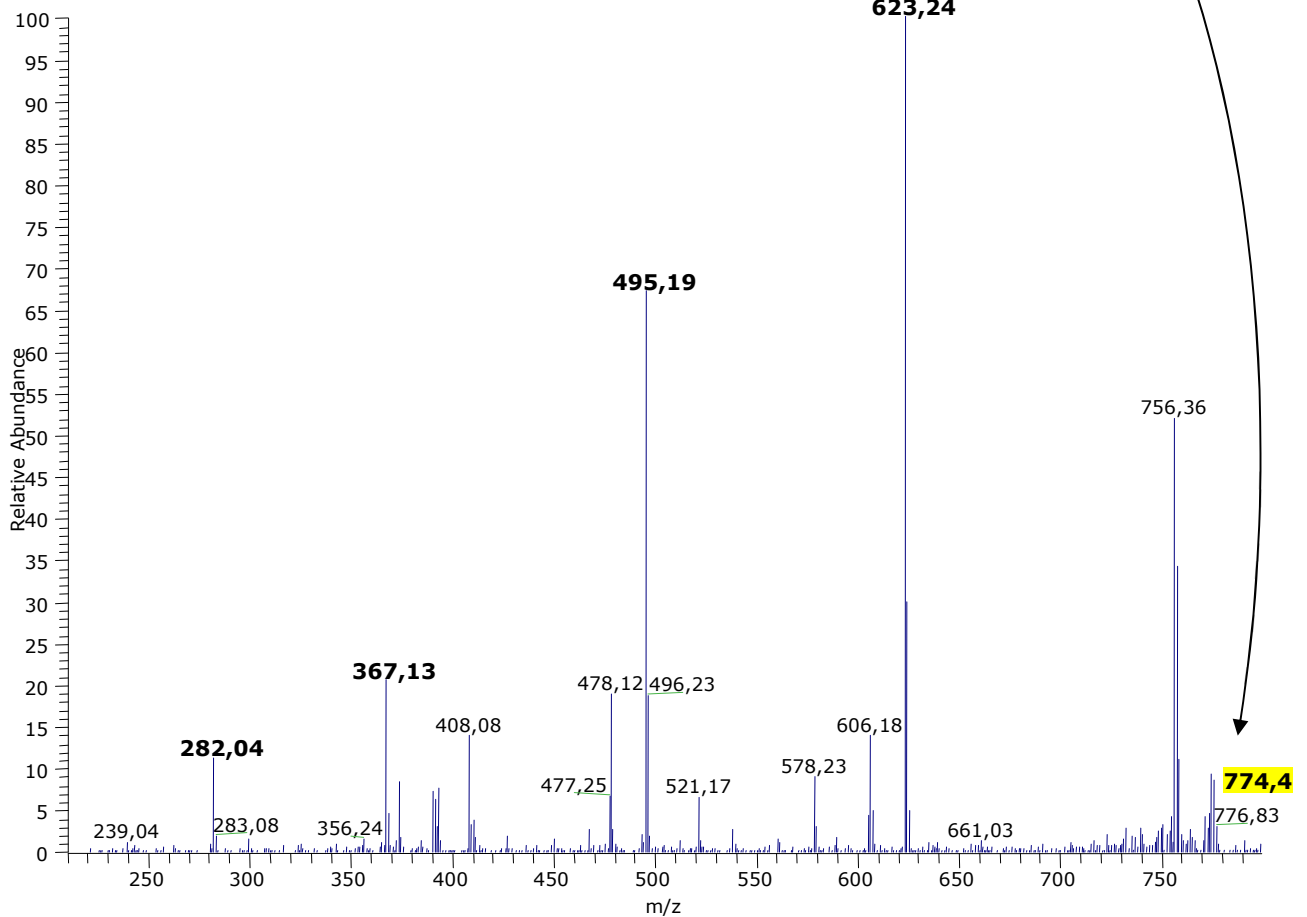
**Peptide 2**

Ac-U	A	A	A	U	Q	U	V	A	G	L	U	P	V	U	U	Q	Q	FOH
128	199	284	355	440	511	639	724	823	908	965	1078	97	196	282	367	495	623	774

**Peptide 3**

Ac-U	A	U	A	U	Q	U	V	U	G	V	U	P	V	U	U	Q	Q	FOH
128	199	284	355	440	568	653	752	837	894	993	1078	97	196	282	367	495	623	774

**Fraction HPLC 2 + TFA MS2 774**



**Fig. 55 : Spectres SM<sup>n</sup> de la partie C-terminale du peptide 2 et 3 de la souche MMS 147.**



**Trichoderma Koningii Oudemans MMS 151**

**Tableau 12 : séquences, masses moléculaires, masse des adduits Na, des ions bichargés, noms et analogie des peptaïbols à longue séquence identifiés chez la souche MMS 151**

Position		Partie N terminale													Partie C terminale H+					Mw	[M +Na] <sup>+</sup>	[M +2Na] <sup>2+</sup> /2	Apparenté à		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18					19	20
Fraction 3	Peptide 1*	Ac-U	A	U	A	<b>A</b>	A	Q	U	V	U	G	L	U	P	V	U	U	Q	Q	FOH	1922	1945	985	Nouveau
		128	199	284	355	426	497	625	710	809	894	951	1064	1149	98	197	282	367	495	623	774				Anal.Trichokonine VI
	Peptide 2*	Ac-U	A	U	A	<b>U</b>	A	Q	U	V	U	G	<b>V</b>	U	P	V	U	U	Q	Q	FOH	1922	1945	985	Nouveau
		128	199	284	355	440	511	639	724	823	908	965	1064	1149	98	197	282	367	495	623	774				Anal.Trichokonine VI
Fraction 4	Peptide 3*	Ac-U	A	U	A	<b>U</b>	A	Q	U	V	U	G	L	U	P	V	U	<b>A</b>	Q	Q	FOH	1922	1945	985	Nouveau
		128	199	284	355	440	511	639	724	823	908	965	1078	1163	98	197	282	353	481	609	760				Anal.Trichokonine VII
	Peptide 4*	Ac-U	A	U	<b>U</b>	<b>G</b>	A	Q	U	V	U	G	L	U	P	V	U	<b>U</b>	Q	Q	FOH	1922	1945	985	Nouveau
		128	199	284	341	426	497	625	710	809	894	951	1064	1149	98	197	282	367	495	623	774				Anal.Trichokonine IV
Fraction 5	Peptide 5	Ac-U	A	U	<b>A</b>	<b>U</b>	A	Q	U	V	U	G	L	U	P	V	U	U	Q	Q	FOH	1936	1959	991	Trichokonine VI
		128	199	284	355	440	511	639	724	823	908	965	1078	1163	98	197	282	367	495	623	774				
Fraction 6	Peptide 6	Ac-U	A	U	A	U	A	Q	U	V	U	G	L	U	P	V	U	<b>V</b>	Q	Q	FOH	1950	1973	998	Trichokonine VIIb
		128	199	284	355	440	511	639	724	823	908	965	1078	1163	98	197	282	381	509	637	788				
	Peptide 7	Ac-U	A	U	A	U	<b>U</b>	Q	U	V	U	G	L	U	P	V	U	<b>U</b>	Q	Q	FOH	1950	1973	998	Trichokonine VIII
		128	199	284	355	440	525	653	738	837	922	979	1092	1177	98	197	282	367	495	623	774				
Fraction 7	Peptide 8*	Ac-U	A	U	A	U	U	Q	U	V	U	G	L	U	P	V	U	V	Q	Q	FOH	1964	1987	1005	Nouveau
		128	199	284	355	440	525	653	738	837	922	979	1092	1177	98	197	282	381	509	637	788				Anal Trichosporine_TS-B-IVd et Trichokonine VII
	Peptide 9*	Ac-U	A	U	A	U	<b>A</b>	Q	U	<b>L</b>	U	G	L	U	P	V	U	V	Q	Q	FOH	1964	1987	1005	Nouveau
		128	199	284	355	440	511	639	724	837	922	979	1092	1177	98	197	282	381	509	637	788				Anal.Trichokonine VII
	Peptide 10*	Ac-U	<b>S</b>	A	<b>L</b>	<b>U</b>	Q	U	<b>V</b>	U	G	L	<b>G</b>	P	<b>L</b>	U	U	Q	LOH	1746	1769	896	Nouveau		
		128	199	286	399	484	612	697	796	881	938	1065	1122	98	211	296	381	509	625				Anal. Hypomurocine BII&BV		
	Peptide 11*	Ac-U	<b>S</b>	A	<b>L</b>	<b>V</b>	Q	U	V	U	G	<b>U</b>	<b>U</b>	P	<b>L</b>	U	U	Q	LOH	1746	1769	896	Nouveau		
		128	199	286	399	498	626	711	810	895	952	1037	1122	98	211	296	381	509	625				Anal. Hypomurocine BII		
Fraction 8	Peptide 12*	Ac-U	<b>S</b>	A	<b>L</b>	<b>V</b>	Q	U	V	U	G	<b>V</b>	U	P	<b>L</b>	U	U	Q	<b>IOH</b>	1760	1783	903	Hypomurocine BV		
		128	215	286	399	498	626	711	810	895	952	1051	1136	98	211	296	381	509	625						

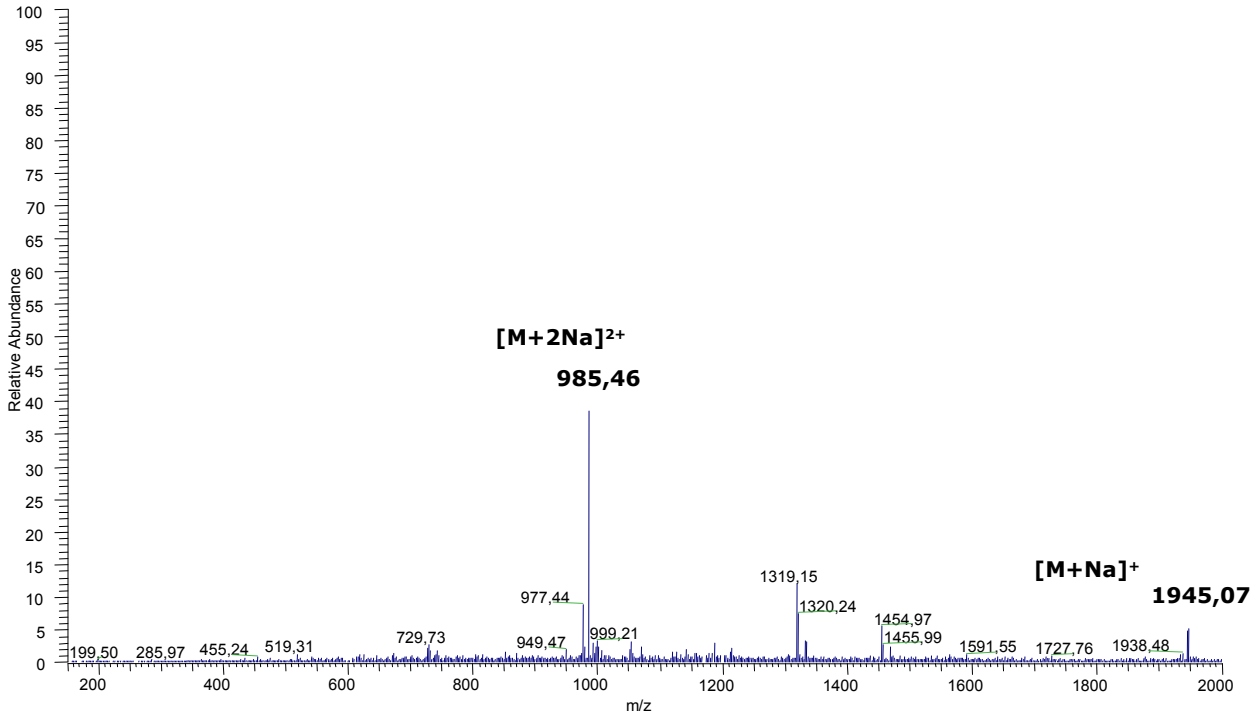
\* Nouvelle molécule

**Trichoderma Koningii Oudemans MMS 151**

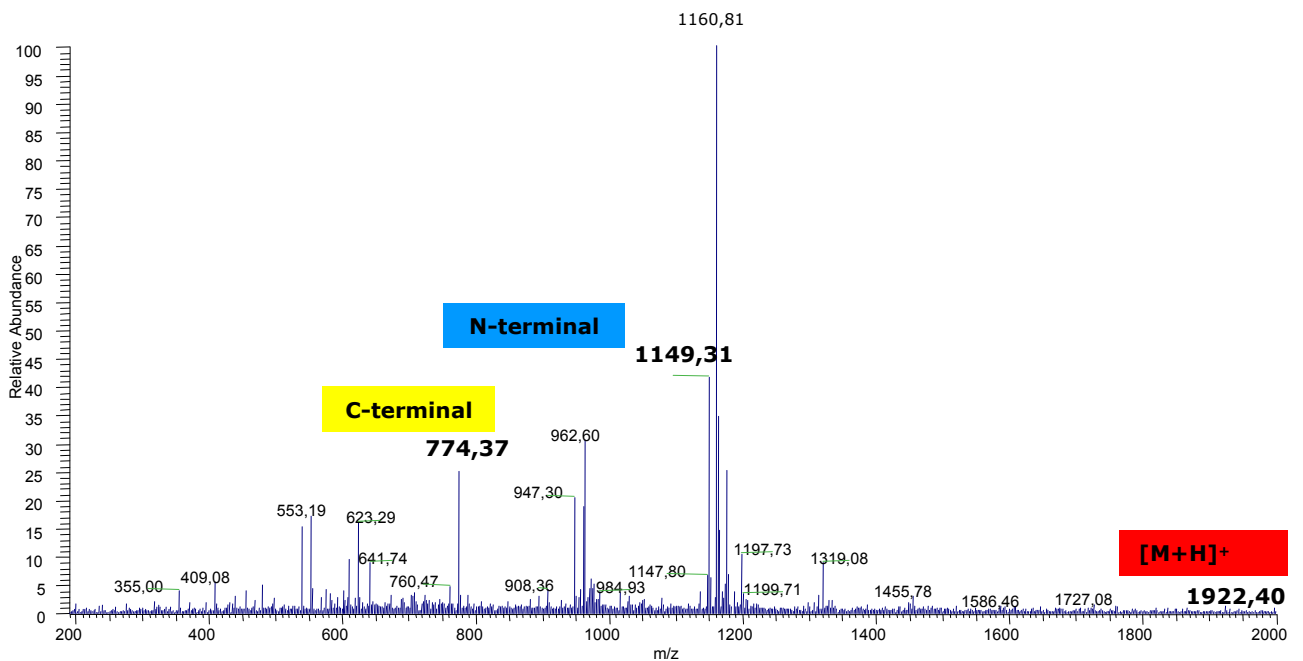
**Peptide 1** Ac-U A U A A A Q U V U G L U P V U U Q Q FOH  
 128 199 284 355 426 497 625 710 809 894 951 1064 1149 98 197 282 367 495 623 774

**Peptide 2** Ac-U A U A U A Q U V U G V U P V U U Q Q FOH  
 128 199 284 355 440 511 639 724 823 908 965 1064 1149 98 197 282 367 495 623 774

**Fraction HPLC 3 sans TFA Full scan**



**Fraction HPLC 3 + TFA Full Scan**

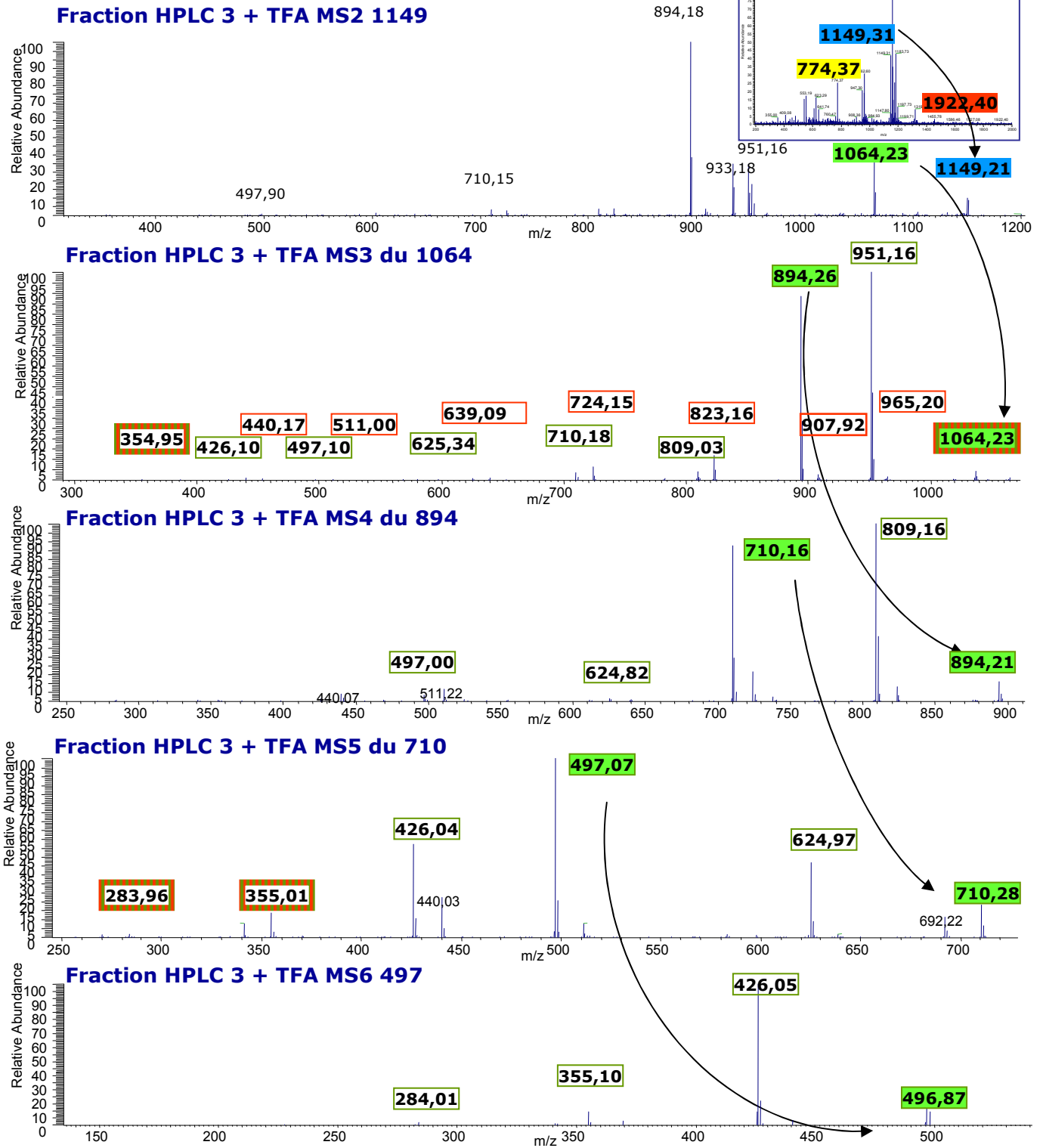


**Fig. 56 : Spectres SM en mode « full-scan » sans (a) et avec TFA (b) du peptide 1 et 2 de la souche MMS 151.**

**Trichoderma Koningii Oudemans MMS 151**

**Peptide 1**

Ac-U	A	U	A	A	A	Q	U	V	U	G	L	U	P	V	U	U	Q	Q	FOH
128	199	284	355	426	497	625	710	809	894	951	1064	1149	98	197	282	367	495	623	774

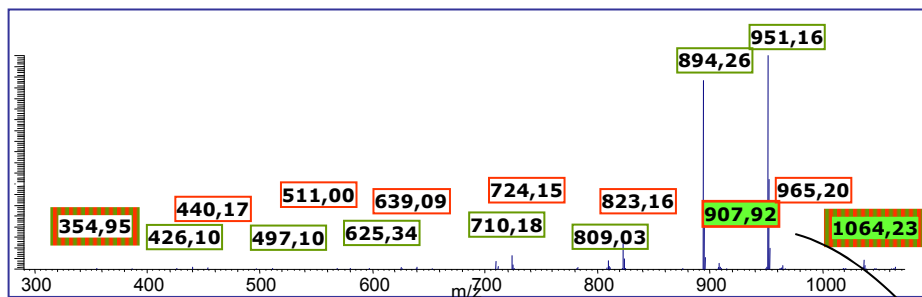
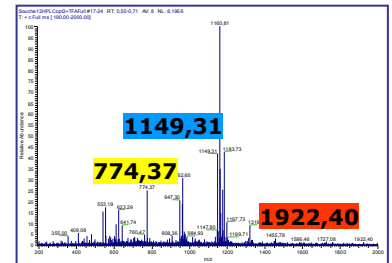


**Fig. 57 : Spectres SM<sup>n</sup> de la partie N-terminale du peptide 1 de la souche MMS 151.**

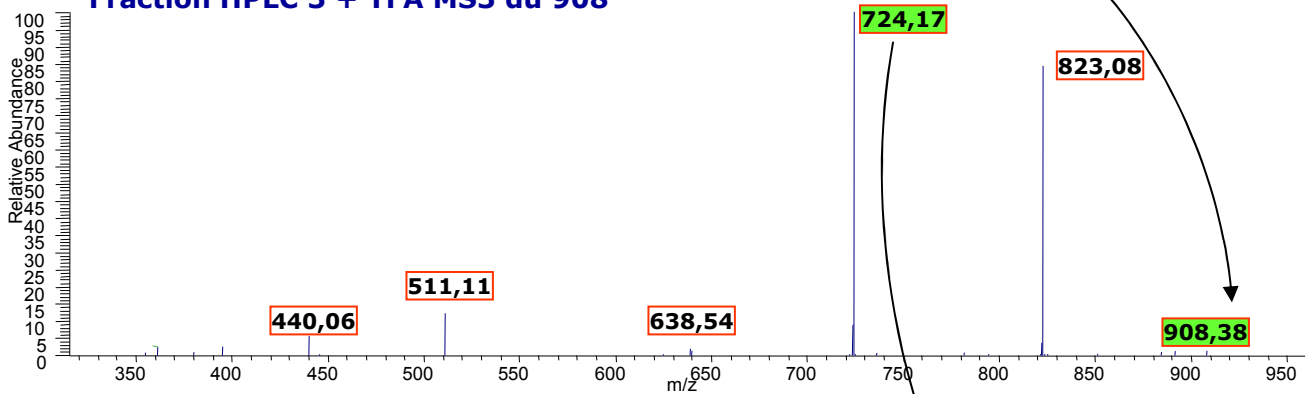
**Trichoderma Koningii Oudemans MMS 151**

**Peptide 2**

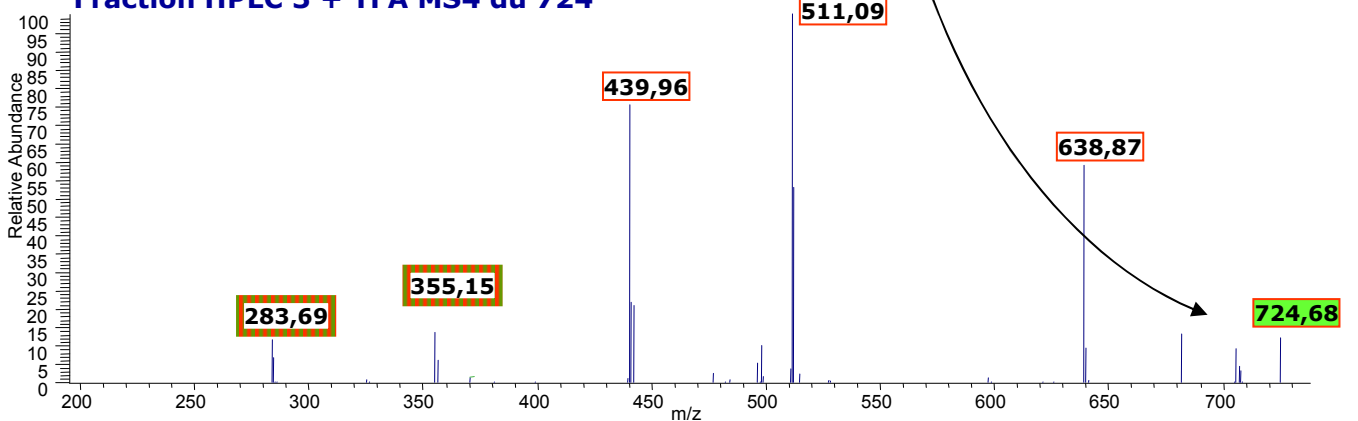
Ac-U A U A U A Q U V U G V U P V U U Q Q FOH  
 128 199 284 355 440 511 639 724 823 908 965 1064 1149 98 197 282 367 495 623 774



**Fraction HPLC 3 + TFA MS3 du 908**



**Fraction HPLC 3 + TFA MS4 du 724**



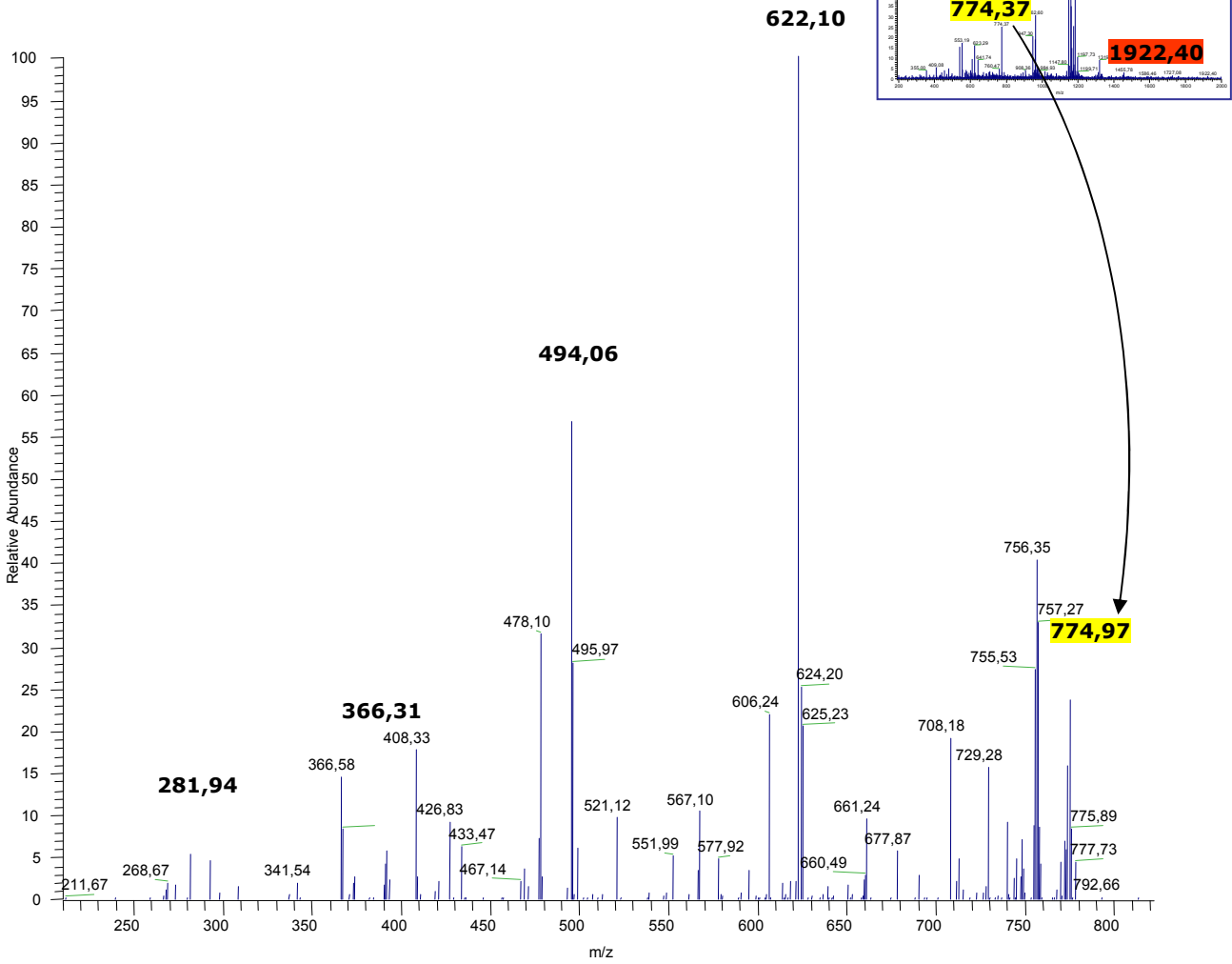
**Fig. 58 : Spectres SM<sup>n</sup> de la partie N-terminale du peptide 2 de la souche MMS 151.**

**Trichoderma Koningii Oudemans MMS 151**

**Peptide 1** Ac-U A U A A A Q U V U G L U P V U U Q Q FOH  
 128 199 284 355 426 497 625 710 809 894 951 1064 1149 98 197 282 367 495 623 774

**Peptide 2** Ac-U A U A U A Q U V U G V U P V U U Q Q FOH  
 128 199 284 355 440 511 639 724 823 908 965 1064 1149 98 197 282 367 495 623 774

**Fraction HPLC 3 + TFA MS2 774**

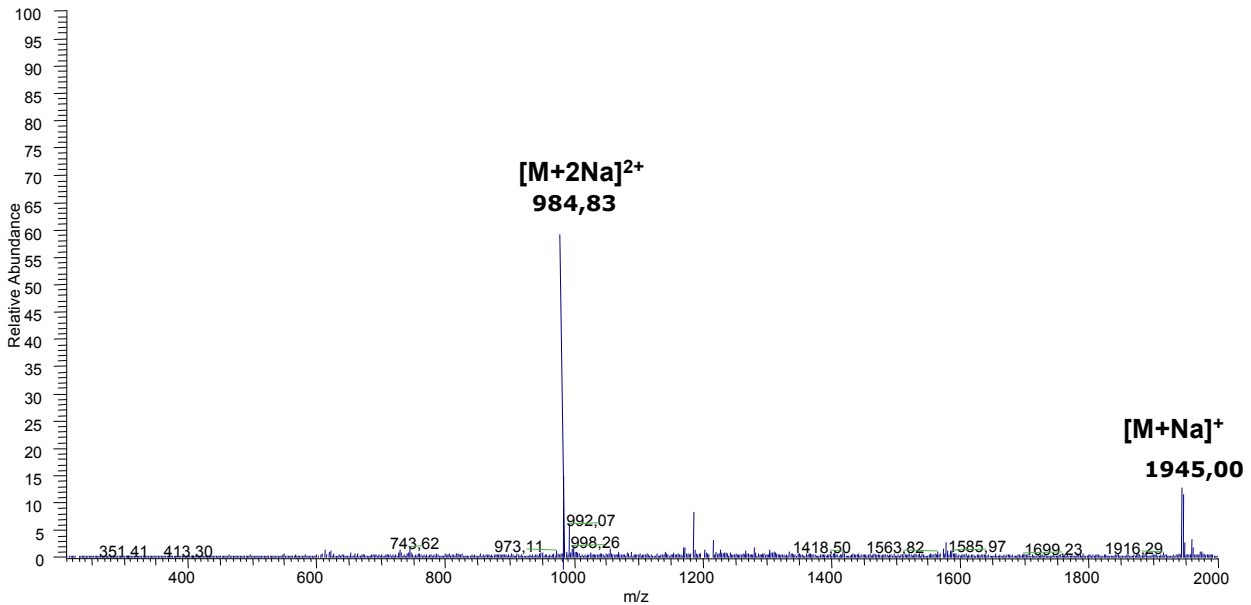


**Fig. 59 : Spectres SM<sup>n</sup> de la partie C-terminale du peptide 1 et 2 de la souche MMS 151.**

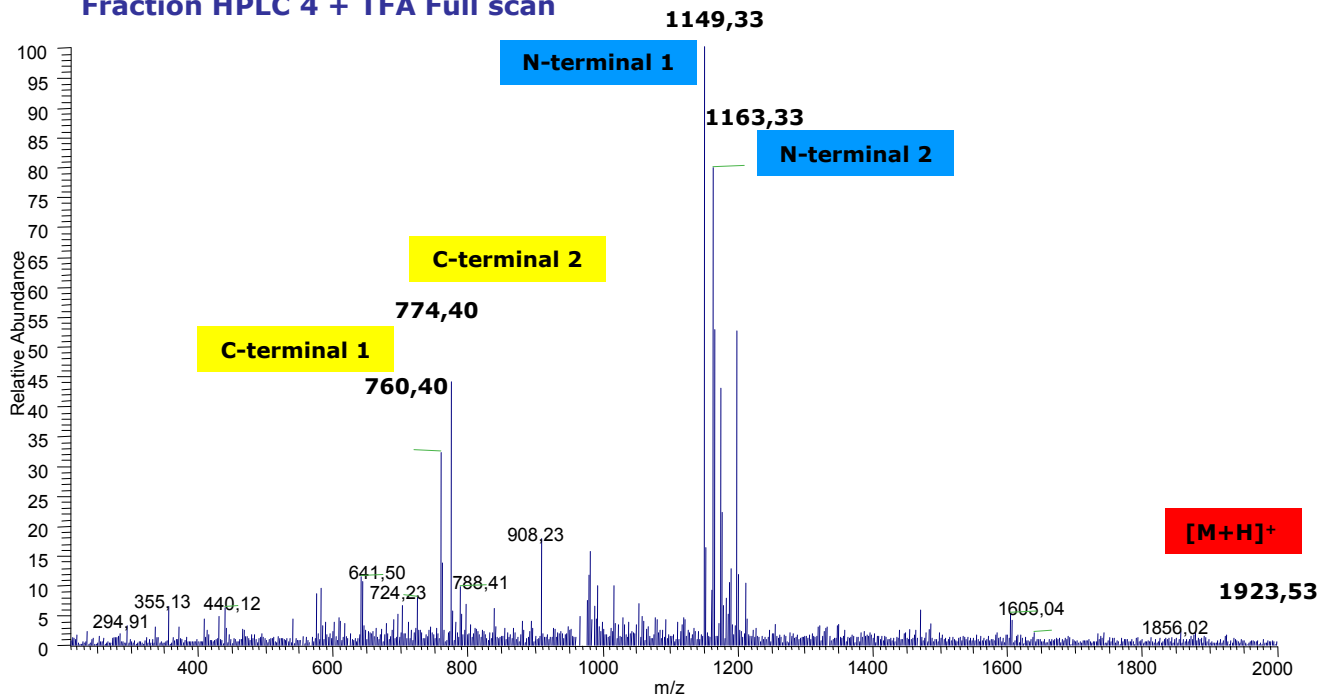
**Trichoderma Koningii Oudemans MMS 151**

<b>Peptide 3</b>	Ac-U	A	U	A	U	A	Q	U	V	U	G	L	U	P	V	U	A	Q	Q	FOH
	128	199	284	355	440	511	639	724	823	908	965	1078	1163	98	197	282	353	481	609	760
<b>Peptide 4</b>	Ac-U	A	U	U	G	A	Q	U	V	U	G	L	U	P	V	U	U	Q	Q	FOH
	128	199	284	341	426	497	625	710	809	894	951	1064	1149	98	197	282	367	495	623	774

**Fraction HPLC 4 sans Acide Full scan**



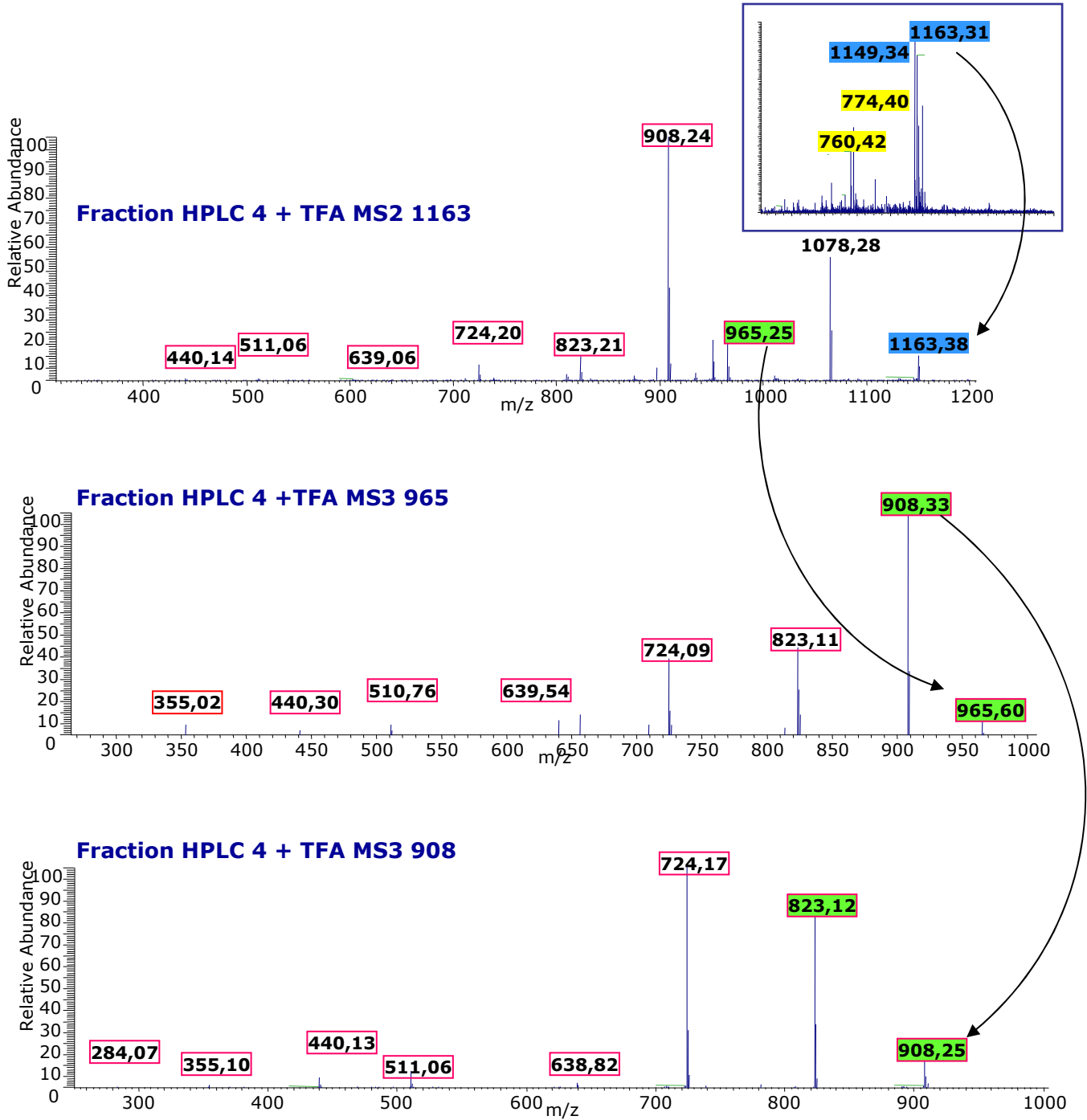
**Fraction HPLC 4 + TFA Full scan**



**Fig. 60 : Spectres SM en mode « full-scan » sans (a) et avec TFA (b) du peptide 3 et 4 de la souche MMS 151.**

**Trichoderma Koningii Oudemans MMS 151**

<b>Peptide 3</b>	Ac-U	A	U	A	U	A	Q	U	V	U	G	L	U	P	V	U	A	Q	Q	FOH
	128	199	284	355	440	511	639	724	823	908	965	1078	1163	98	197	282	353	481	609	760
<b>Peptide 4</b>	Ac-U	A	U	U	G	A	Q	U	V	U	G	L	U	P	V	U	U	Q	Q	FOH
	128	199	284	341	426	497	625	710	809	894	951	1064	1149	98	197	282	367	495	623	774

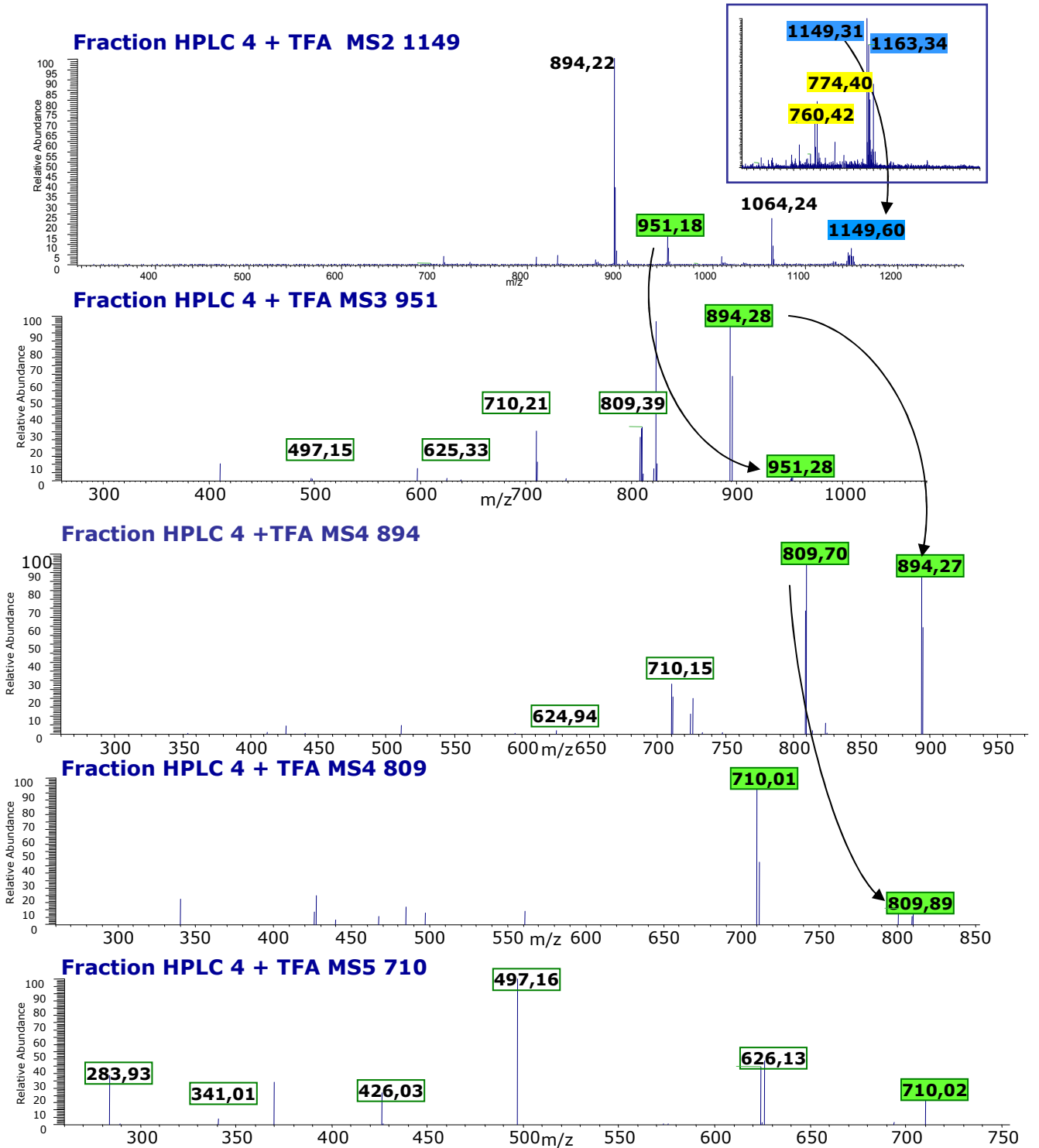


**Fig. 61 : Spectres SM<sup>n</sup> de la partie N-terminale du peptide 3 de la souche MMS 151.**

**Trichoderma Koningii Oudemans MMS 151**

<b>Peptide 3</b>	Ac-U	A	U	A	U	A	Q	U	V	U	G	L	U	P	V	U	A	Q	Q	FOH
	128	199	284	355	440	511	639	724	823	908	965	1078	1163	98	197	282	353	481	609	760

<b>Peptide 4</b>	Ac-U	A	U	U	G	A	Q	U	V	U	G	L	U	P	V	U	U	Q	Q	FOH
	128	199	284	341	426	497	625	710	809	894	951	1064	1149	98	197	282	367	495	623	774



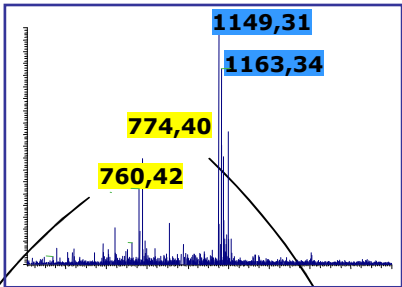
**Fig. 62 : Spectres SM<sup>n</sup> de la partie N-terminale du peptide 4 de la souche MMS 151.**



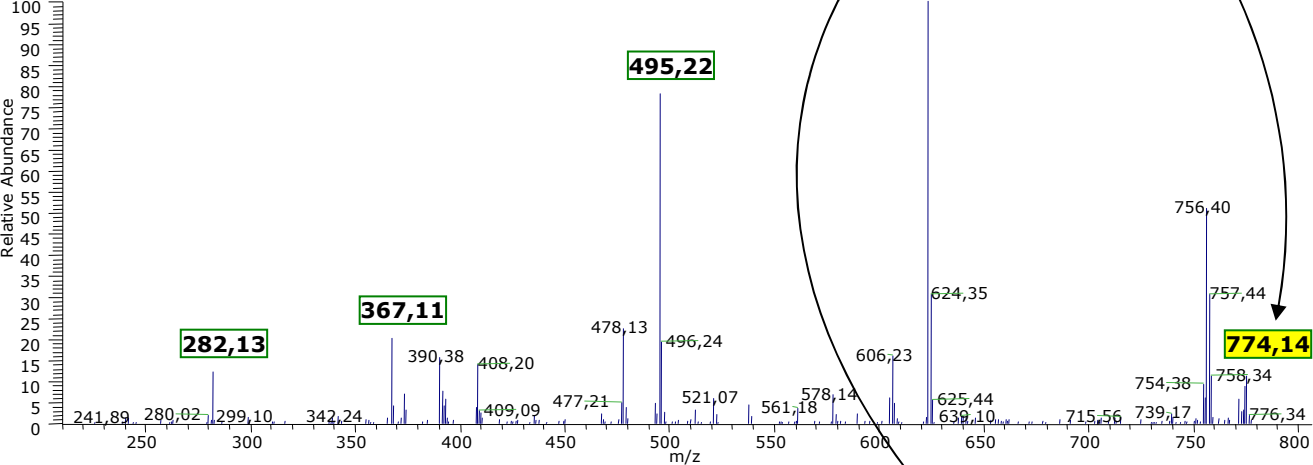
**Trichoderma Koningii Oudemans MMS 151**

<b>Peptide 3</b>	Ac-U	A	U	A	<b>U</b>	A	Q	U	V	U	G	L	U	<b>P</b>	V	U	<b>A</b>	Q	Q	FOH
	128	199	284	355	440	511	639	724	823	908	965	1078	1163	98	197	282	353	481	609	760

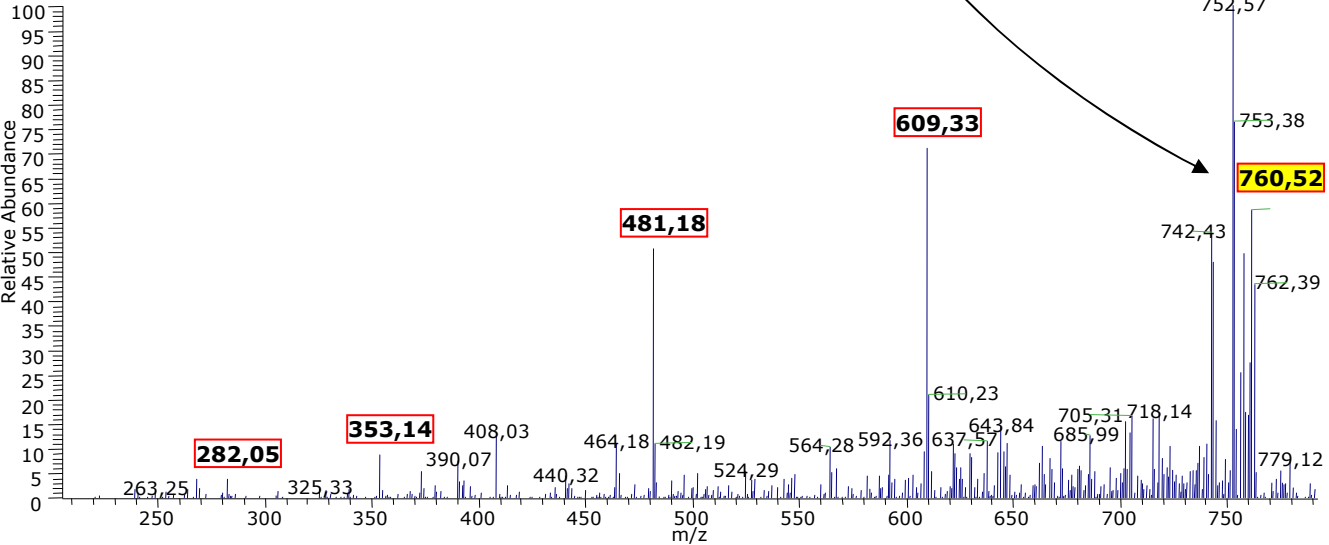
<b>Peptide 4</b>	Ac-U	A	U	<b>U</b>	<b>G</b>	A	Q	U	V	U	G	L	U	<b>P</b>	V	U	<b>U</b>	Q	Q	FOH
	128	199	284	341	426	497	625	710	809	894	951	1064	1149	98	197	282	367	495	623	774



**Fraction HPLC 4 + TFA MS2 774**



**Fraction HPLC 4 + TFA MS2 760**

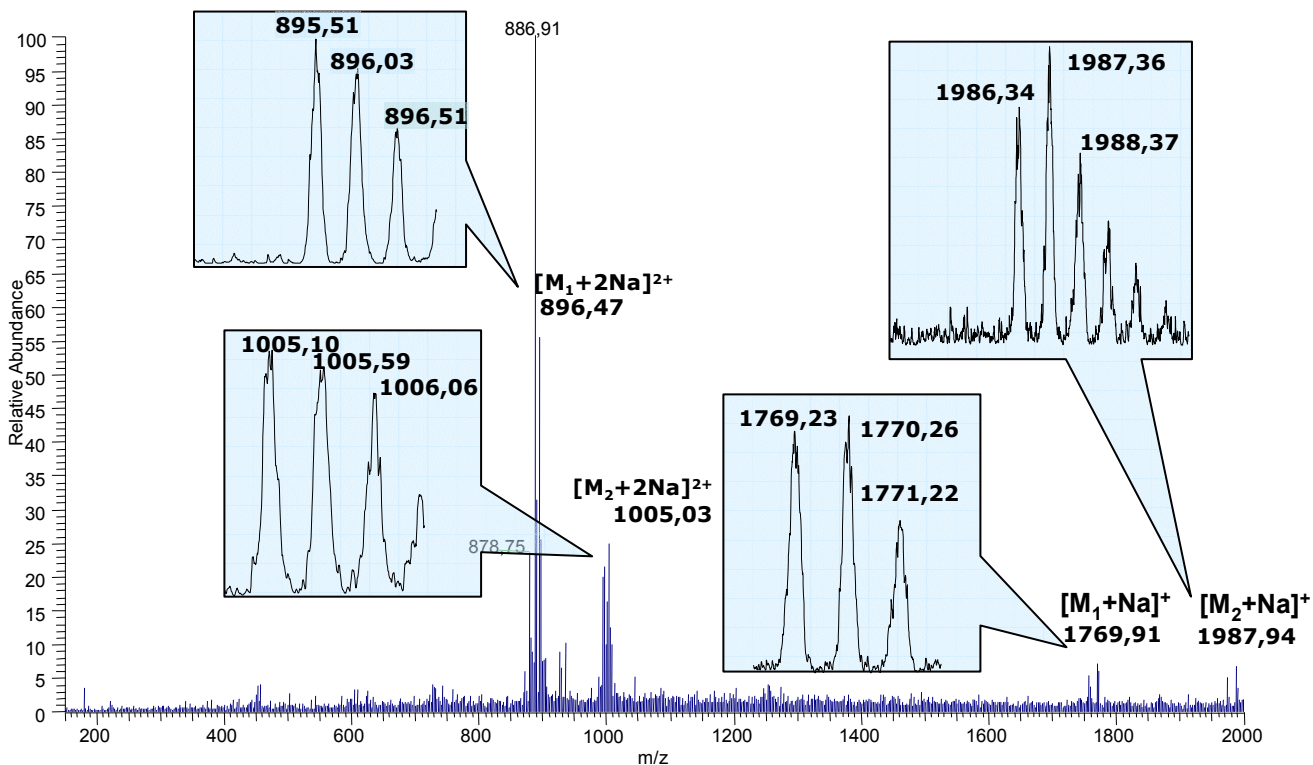


**Fig. 63 : Spectres SM<sup>n</sup> des parties C-terminales du peptide 3 et 4 de la souche MMS 151.**

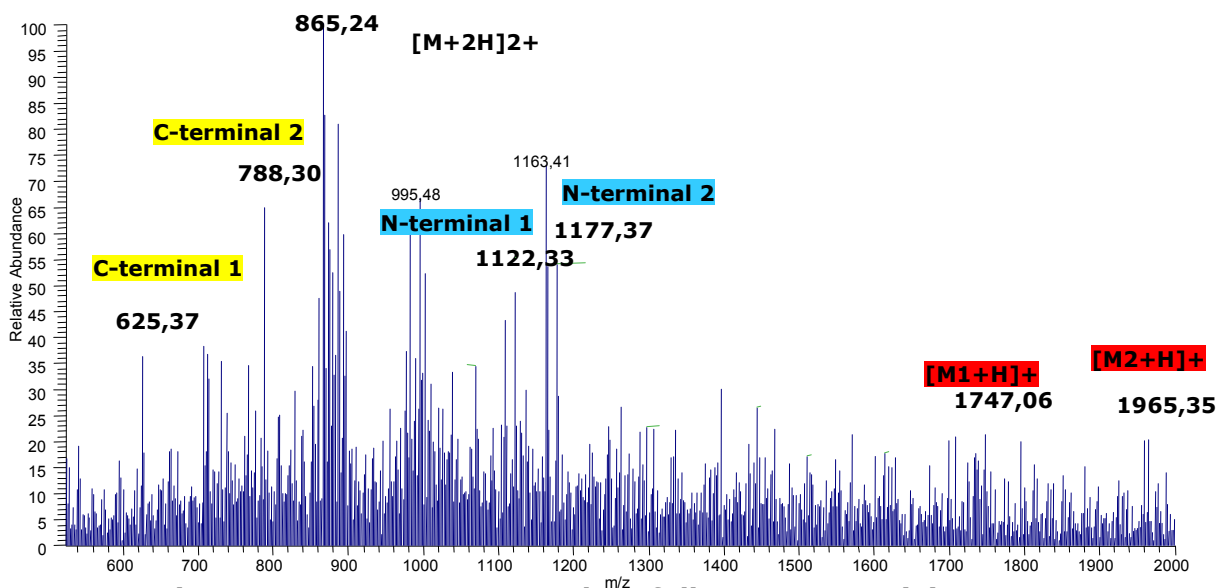
**Trichoderma Koningii Oudemans MMS 151**

<b>Peptide 8</b>	Ac-U	A	U	A	U	U	Q	U	V	U	G	L	U	P	V	U	V	Q	Q	FOH
	128	199	284	355	440	525	653	738	837	922	979	1092	1177	98	197	282	381	509	637	788
<b>Peptide 9</b>	Ac-U	A	U	A	U	A	Q	U	L	U	G	L	U	P	V	U	V	Q	Q	FOH
	128	199	284	355	440	511	639	724	837	922	979	1092	1177	98	197	282	381	509	637	788
<b>Peptide 10</b>	Ac-U	S	A	L	U	Q	U	V	U	G	L	G	P	L	U	U	Q	LOH		
	128	199	286	399	484	612	697	796	881	938	1065	1122	98	211	296	381	509	625		
<b>Peptide 11</b>	Ac-U	S	A	L	V	Q	U	V	U	G	U	U	P	L	U	U	Q	LOH		
	128	199	286	399	498	626	711	810	895	952	1037	1122	98	211	296	381	509	625		

**Fraction HPLC 7 sans acide Full scan**



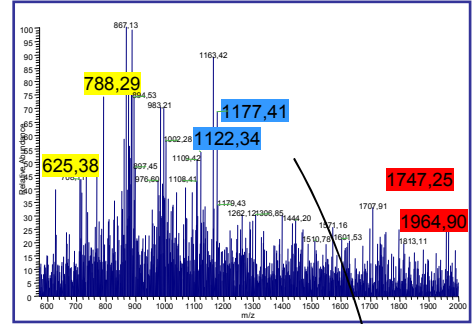
**Fraction HPLC 7 +TFA Full scan**



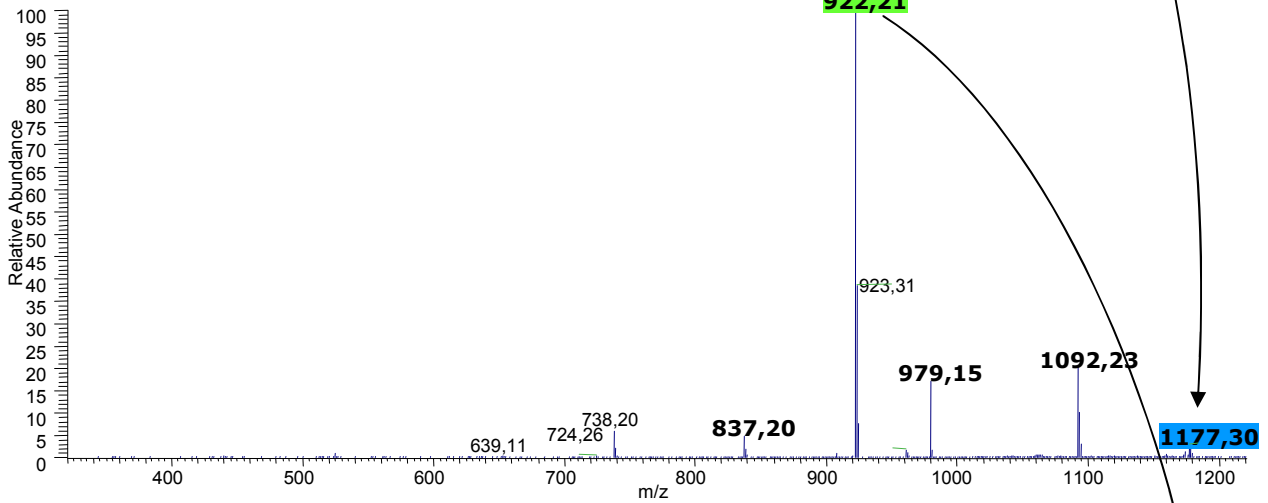
**Fig. 64 : Spectres SM en mode « full-scan » sans (a) et avec TFA (b) des peptides 8,9,10 et 11 de la souche MMS 151.**

**Trichoderma Koningii Oudemans MMS 151**

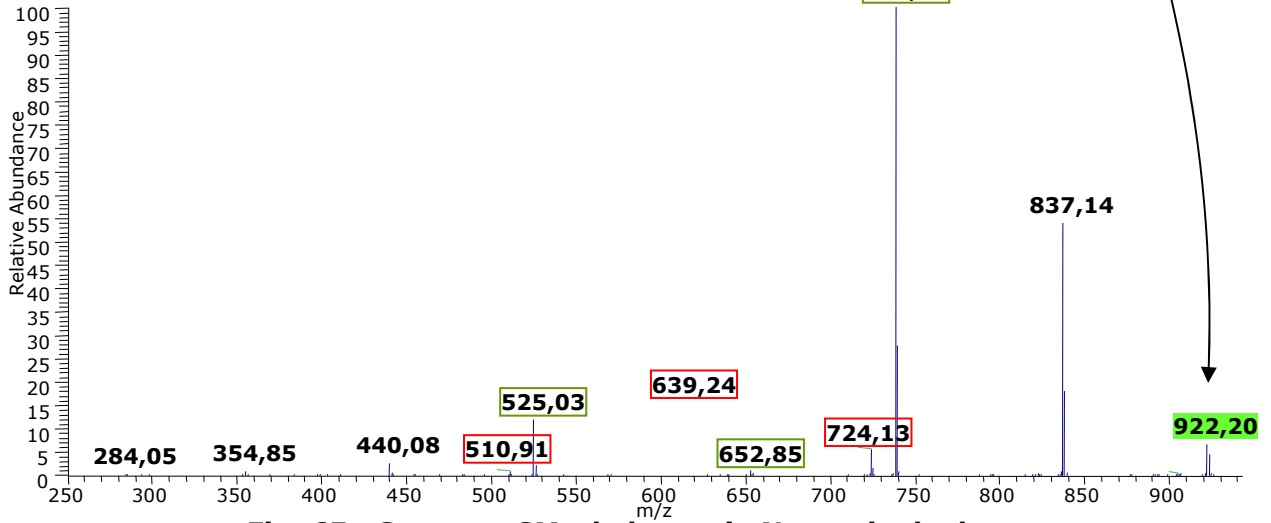
<b>Peptide 8</b>	Ac-U	A	U	A	U	U	Q	U	V	U	G	L	U	P	V	U	V	Q	Q	FOH
	128	199	284	355	440	525	653	738	837	922	979	1092	1177	98	197	282	381	509	637	788
<b>Peptide 9</b>	Ac-U	A	U	A	U	A	Q	U	L	U	G	L	U	P	V	U	V	Q	Q	FOH
	128	199	284	355	440	511	639	724	837	922	979	1092	1177	98	197	282	381	509	637	788



**Fraction HPLC 7 + TFA MS2 1177**



**Fraction HPLC 7 +TFA MS3 922**



**Fig. 65 : Spectres SM<sup>n</sup> de la partie N-terminale du peptide 8 et 9 de la souche MMS 151.**

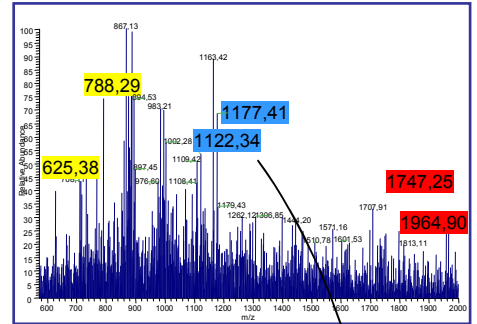
**Trichoderma Koningii Oudemans MMS 151**

**Peptide 10**

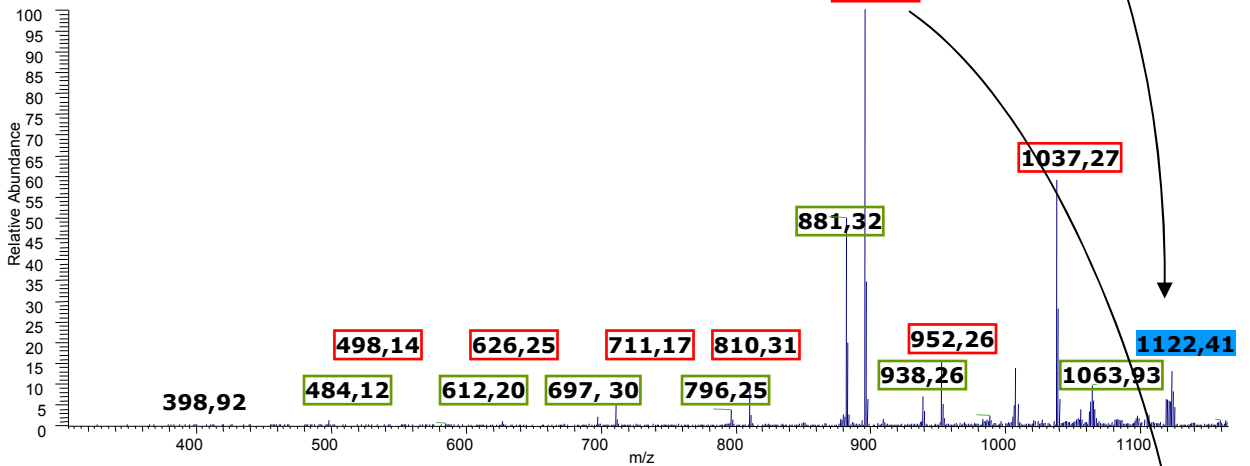
Ac-U	S	A	L	U	Q	U	V	U	G	L	G	P	L	U	U	Q	LOH
128	199	286	399	484	612	697	796	881	938	1065	1122	98	211	296	381	509	625

**Peptide 11**

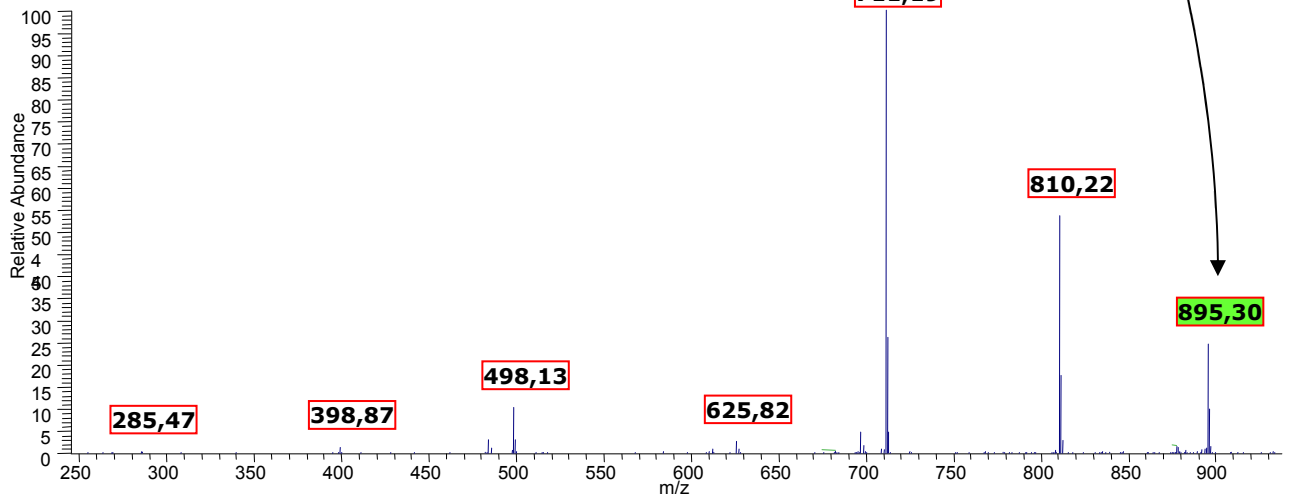
Ac-U	S	A	L	V	Q	U	V	U	G	U	U	P	L	U	U	Q	LOH
128	199	286	399	498	626	711	810	895	952	1037	1122	98	211	296	381	509	625



**Fraction HPLC 7 +TFA MS2 1122**



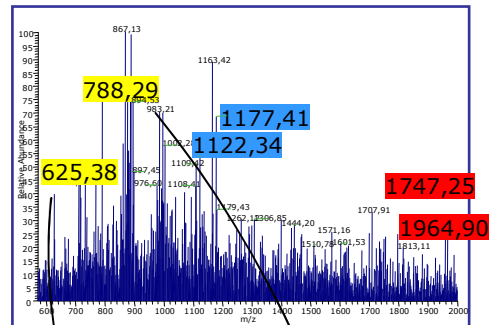
**Fraction HPLC 7 + TFA MS3 895**



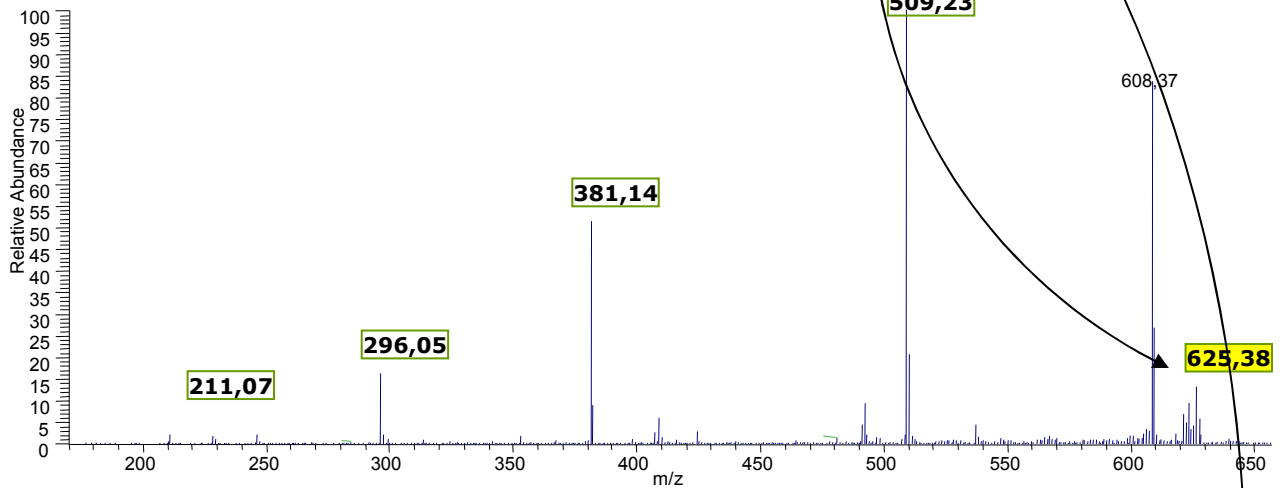
**Fig. 66 : Spectres SM<sup>n</sup> de la partie N-terminale du peptide 10 et 11 de la souche MMS 151.**

**Trichoderma Koningii Oudemans MMS 151**

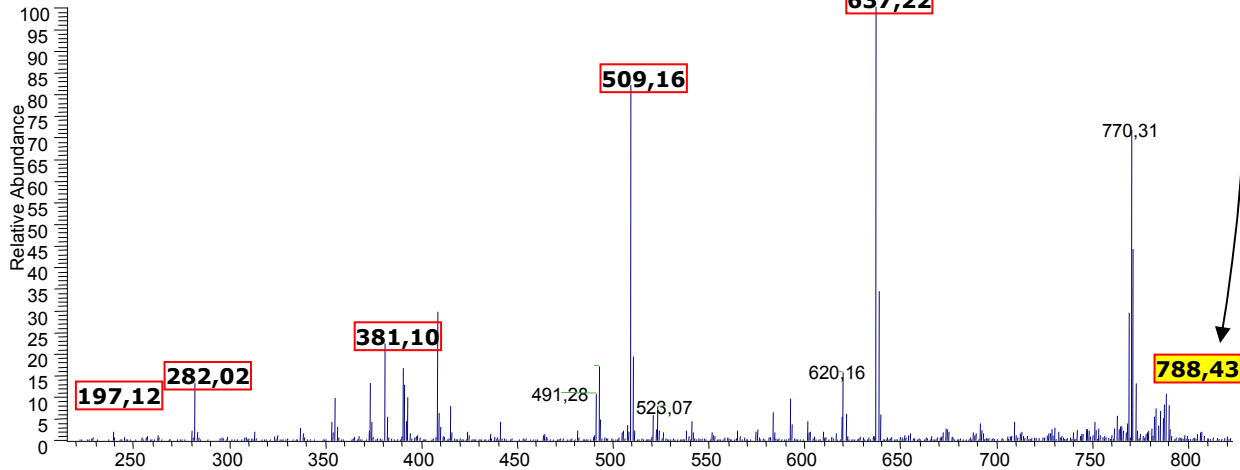
<b>Peptide 8</b>	Ac-U	A	U	A	U	U	Q	U	V	U	G	L	U	P	V	U	V	Q	Q	FOH
	128	199	284	355	440	525	653	738	837	922	979	1092	1177	98	197	282	381	509	637	788
<b>Peptide 9</b>	Ac-U	A	U	A	U	A	Q	U	L	U	G	L	U	P	V	U	V	Q	Q	FOH
	128	199	284	355	440	511	639	724	837	922	979	1092	1177	98	197	282	381	509	637	788
<b>Peptide 10</b>	Ac-U	S	A	L	U	Q	U	V	U	G	L	G	P	L	U	U	Q	LOH		
	128	199	286	399	484	612	697	796	881	938	1065	1122	98	211	296	381	509	625		
<b>Peptide 11</b>	Ac-U	S	A	L	V	Q	U	V	U	G	U	U	P	L	U	U	Q	LOH		
	128	199	286	399	498	626	711	810	895	952	1037	1122	98	211	296	381	509	625		



**Fraction HPLC 7 + TFA MS2 626**



**Fraction HPLC 7 + TFA MS2 788**



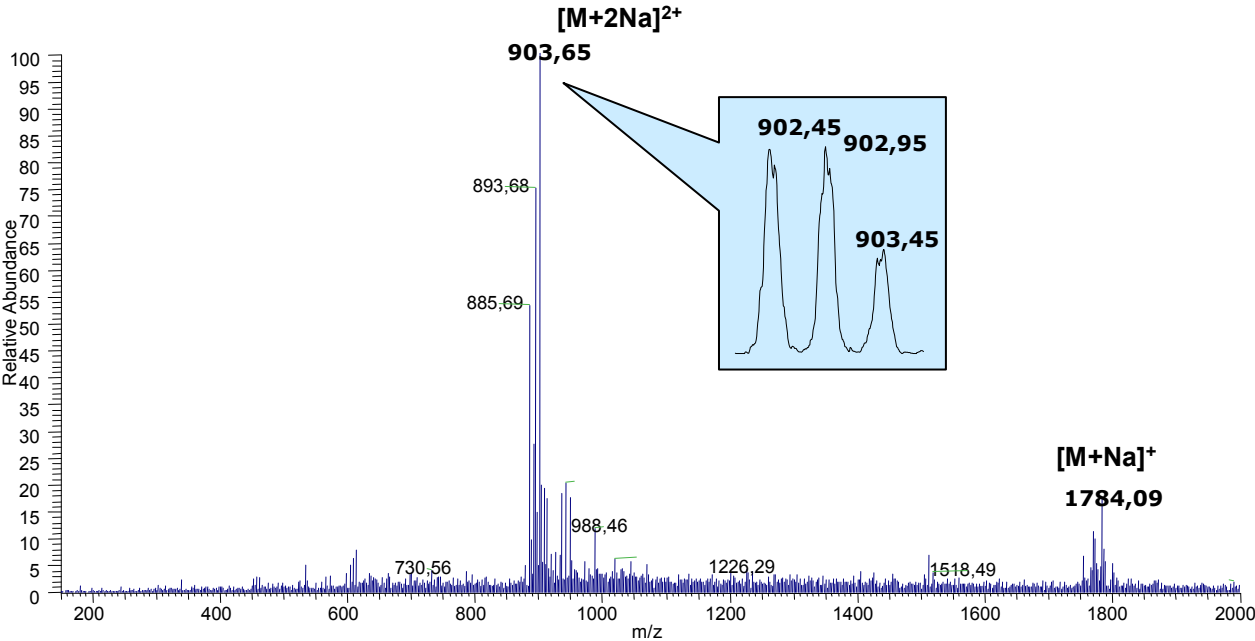
**Fig. 67 : Spectres SM<sup>n</sup> des parties C-terminales des peptides 8, 9, 10 et 11 de la souche MMS 151.**

**Trichoderma Koningii Oudemans MMS 151**

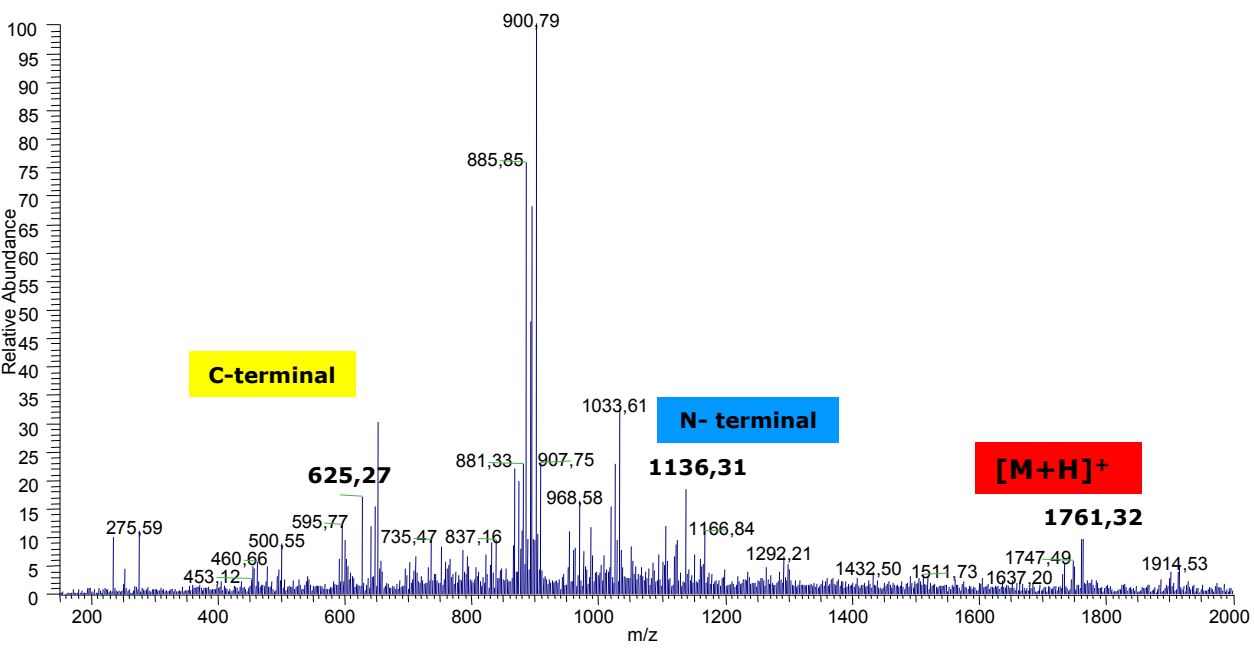
**Peptide 12**

Ac-U	S	A	L	V	Q	U	V	U	G	V	U	P	L	U	U	Q	IOH
128	215	286	399	498	626	711	810	895	952	1051	1136	98	211	296	381	509	625

**Fraction HPLC 8 sans acide Full scan**



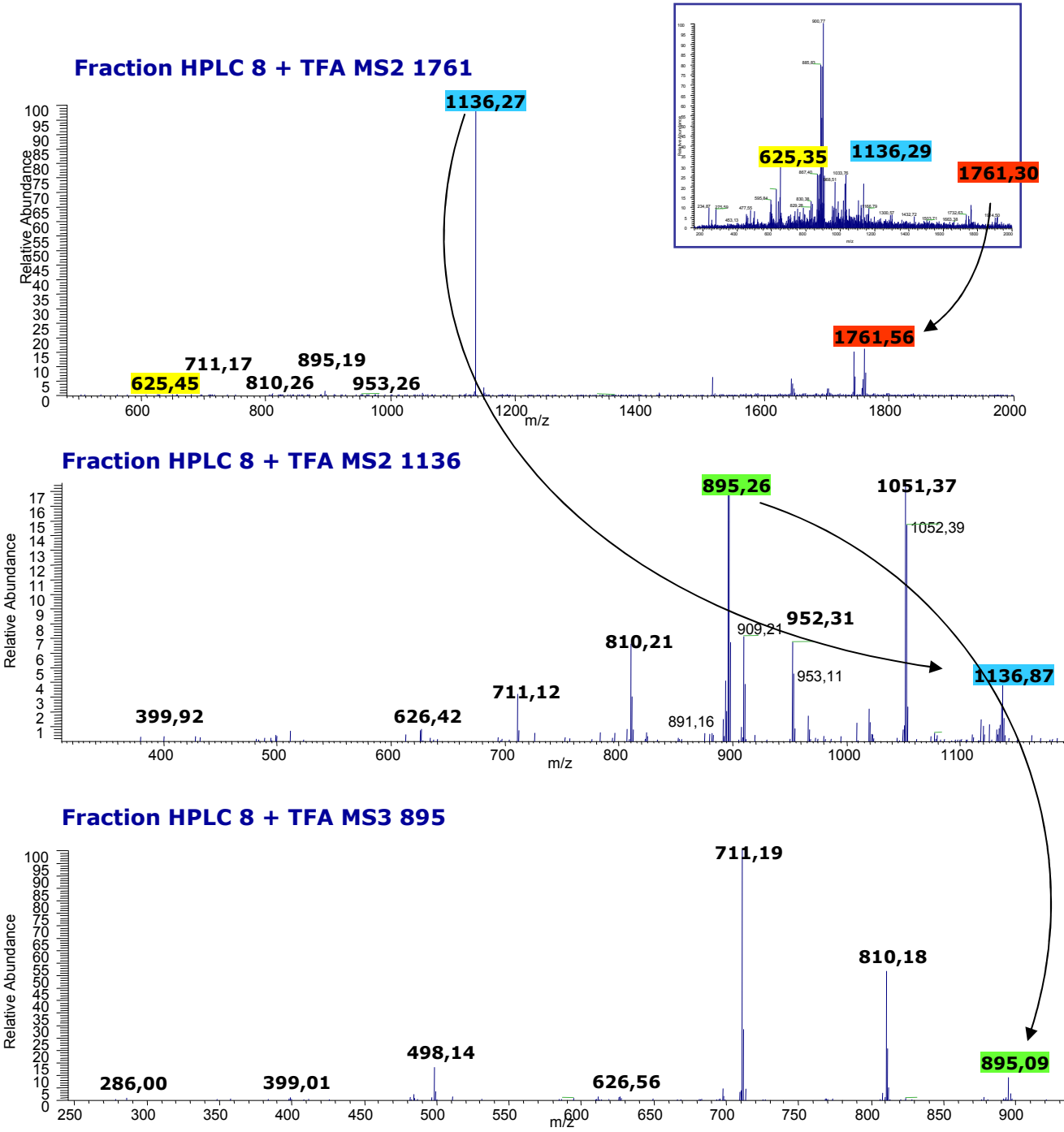
**Fraction HPLC 8 + TFA Full scan**



**Fig. 68 : Spectres SM en mode « full-scan » sans (a) et avec TFA (b) du peptide 12 de la souche MMS 151.**

**Trichoderma Koningii Oudemans MMS 151**

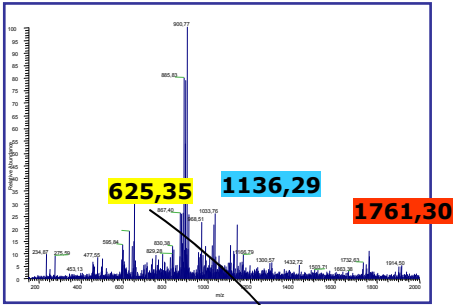
**Peptide 12** Ac-U S A L V Q U V U G V U P L U U Q IOH  
 128 215 286 399 498 626 711 810 895 952 1051 1136 98 211 296 381 509 625



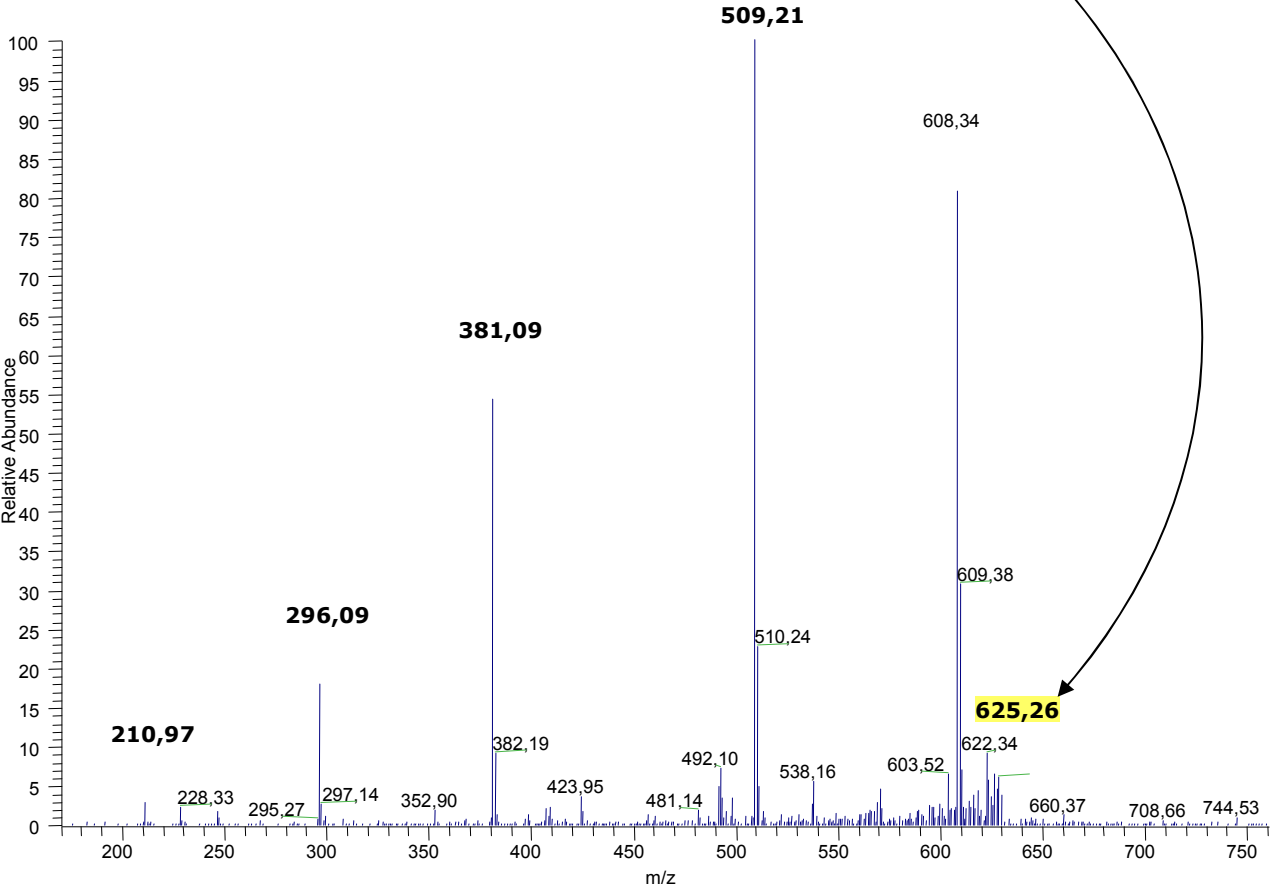
**Fig. 69 : Spectres SM<sup>n</sup> de la partie N-terminale du peptide 12 de la souche MMS 151.**

**Trichoderma Koningii Oudemans MMS 151**

<b>Peptide 12</b>	Ac-U	S	A	L	V	Q	U	V	U	G	V	U	P	L	U	U	Q	IOH
	128	215	286	399	498	626	711	810	895	952	1051	1136	98	211	296	381	509	625



**Fraction HPLC 8 + TFA MS2 626**



**Fig. 70 : Spectres SM<sup>n</sup> de la partie C-terminale du peptide 12 de la souche MMS 151.**



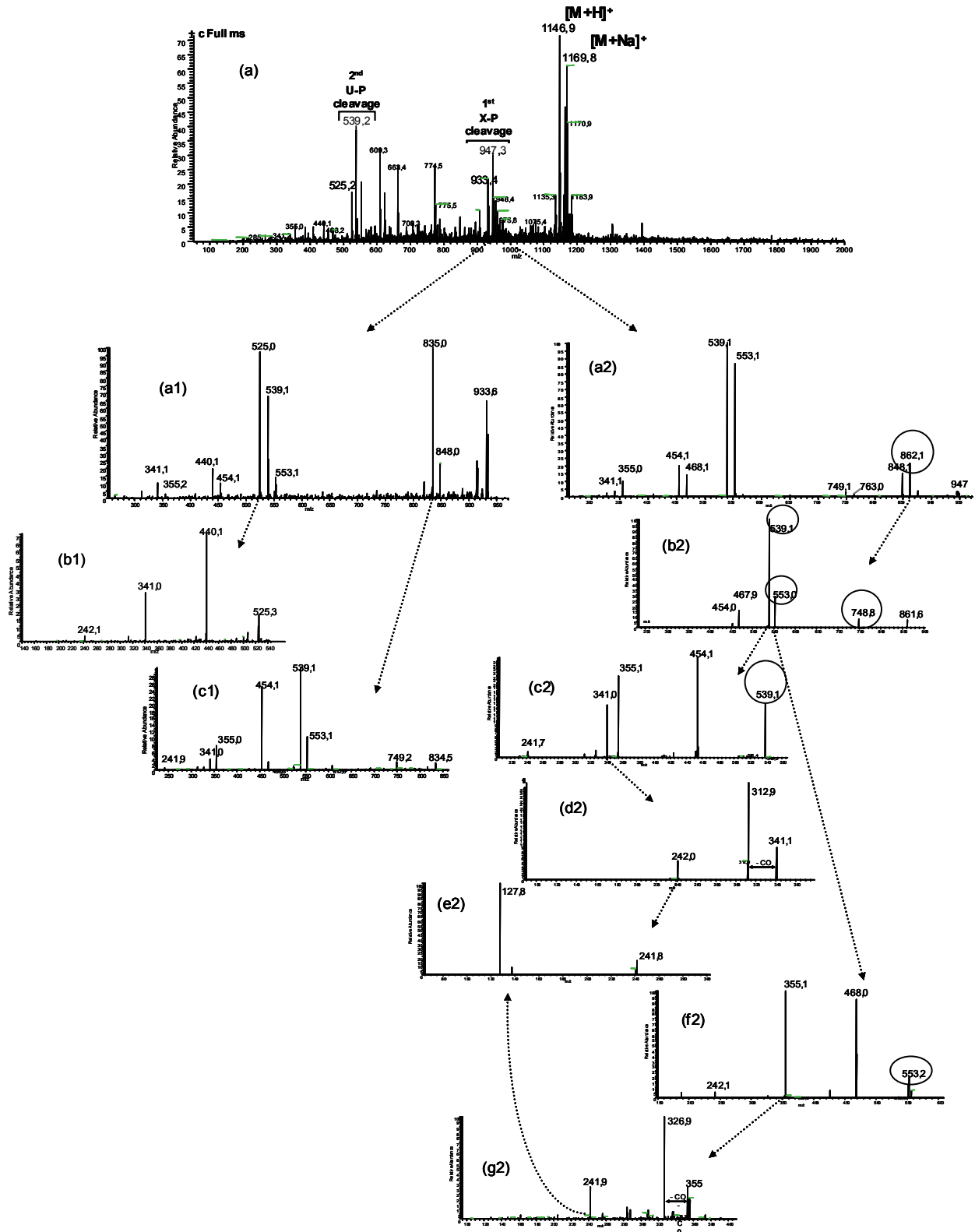
**Trichoderma Koningii Oudemans MMS 151**

**Tableau 14 : séquences, masses moléculaires, masse des adduits Na, des ions bichargés, noms et analogie des peptaïbols à courte séquence identifiés chez la souche MMS 151**

Position		1	2	3	4	5	6	7	8	9	10	11	Mw	[M+Na] <sup>+</sup>	[M+2Na] <sup>2+/2</sup>	Nom
Fraction 2	Peptide 1*	Ac-U	N	L	L	U	P	L	U	U	P	LOH	1146	1169	596	Trichobrachine A-I
		128	242	355	468	553	650	763	848	933	1030	1146				
	Peptide 2*	Ac-U	N	L	L	U	P	V	L	U	P	VOH	1146	1169	596	Trichobrachine A-II
		128	242	355	468	553	650	749	862	947	1044	1146				
	Peptide 3*	Ac-U	N	V	L	U	P	L	L	U	P	VOH	1146	1169	596	Trichobrachine A-III
		128	242	341	454	539	636	749	862	947	1044	1146				
	Peptide 4*	Ac-U	N	L	V	U	P	L	L	U	P	VOH	1146	1169	596	Trichobrachine A-IV
		128	242	355	454	539	636	749	862	947	1044	1146				
	Peptide 5*	Ac-U	N	L	L	U	P	V	U	V	P	LOH	1146	1169	596	Trichobrachine B-I
		128	242	355	468	553	650	749	834	933	1030	1146				
	Peptide 6*	Ac-U	N	V	L	U	P	L	U	V	P	LOH	1146	1169	596	Trichobrachine B-II
		128	242	341	454	539	636	749	834	933	1030	1146				
	Peptide 7*	Ac-U	N	L	V	U	P	L	U	V	P	LOH	1146	1169	596	Trichobrachine B-III
		128	242	341	454	539	636	749	834	933	1030	1146				
	Peptide 8*	Ac-U	N	L	L	U	P	L	U	V	P	VOH	1146	1169	596	Trichobrachine B-IV
		128	242	355	468	553	650	763	848	947	1044	1146				
	Peptide 9	Ac-U	N	V	V	U	P	L	L	U	P	LOH	1146	1169	596	Trichorovine TV-lb ou lla
		128	242	341	440	525	622	735	848	933	1030	1146				

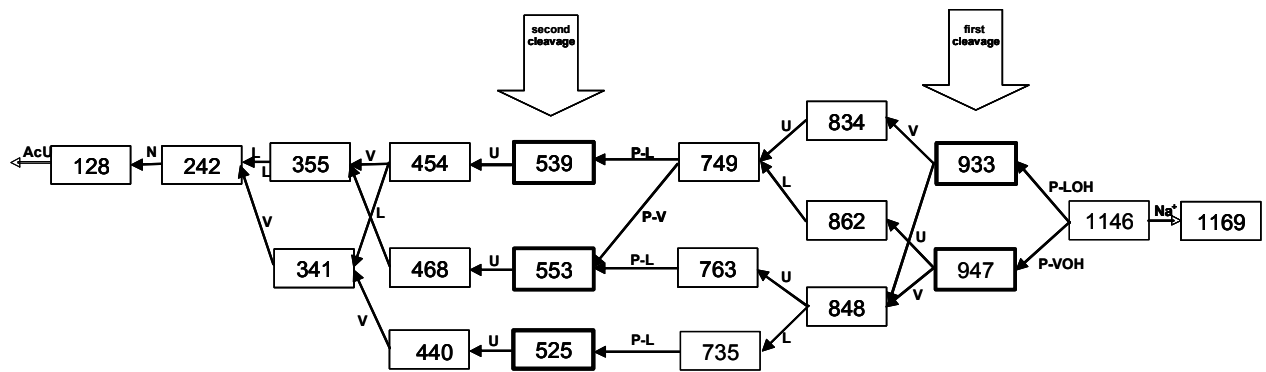
\* Nouvelle molécule

**Trichoderma Koningii Oudemans MMS 151**



**Fig. 71 : MS<sup>n</sup> Fragmentation de l'ion m/z 1146** (a): spectre SM Full scan (a1): spectre MS<sup>2</sup> de l'ion m/z 933. (b1) et (c1) respectivement spectres SM<sup>2</sup> des ions m/z 525 et 835. (a2), (b2), (c2), (d2) et (e2) respectivement spectres SM<sup>2</sup> à SM<sup>6</sup> des ions m/z 947, 862, 539, 341 et 242. (f2) et (g2) respectivement spectres SM<sup>4</sup> et SM<sup>5</sup> des ions m/z 553 et 355.

**Trichoderma Koningii Oudemans MMS 151**



**Fig. 72 : Graphe de filiation établi en fonction des ions fils issus de la fragmentation MS<sup>n</sup> des peptaïbols courts contenus dans la fraction CLHP 2**

## Trichoderma Koningii Oudemans MMS 175

**Tableau 16 : séquences, masses moléculaires, masse des adduits Na, des ions bichargés, noms et analogie des peptaïbols identifiés chez la souche MMS 175**

Position		Partie N terminale												Partie C terminale H+								Mw	[M+Na] <sup>+</sup>	[M+2Na] <sup>2+/2</sup>	Nom commun
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20				
<b>Fraction 1</b>	<b>Peptide 1</b>	Ac-U	A	U	A	U	A	Q	U	V	U	G	L	U	P	V	U	U	Q	Q	FOH	1936	1959	991	Trichokonine VI
		128	199	284	355	440	511	639	724	823	908	965	1078	1163	98	197	282	367	495	623	774				
<b>Fraction 2</b>	<b>Peptide 2*</b>	Ac-U	A	U	A	U	A	Q	U	V	A	G	L	U	P	V	U	U	Q	Q	FOH	1922	1945	984	Nouveau
		128	199	284	355	440	511	639	724	823	894	951	1064	1149	98	197	282	367	495	623	774				Anal. Trichokonine VI
	<b>Peptide 3*</b>	Ac-U	A	U	A	A	A	Q	U	V	U	G	L	U	P	V	U	U	Q	Q	FOH	1922	1945	984	Nouveau
		128	199	284	355	426	497	625	710	809	894	951	1064	1149	98	197	282	367	495	623	774				Anal. Trichokonine VI
	<b>Peptide 4*</b>	Ac-U	A	U	A	U	A	Q	U	V	U	G	L	U	P	V	U	A	Q	Q	FOH	1922	1945	984	Nouveau
		128	199	284	355	440	511	639	724	823	908	965	1078	1163	98	197	282	353	481	609	760				Anal. Trichokonine VII
<b>Fraction 3</b>	<b>Peptide 5*</b>	** Ac-U	A	U	A	U	A	Q	U	Vx	A	G	Lx	U	P	Vx	U	U	Q	Q	FOH	1922	1945	984	Nouveau
		128	199	284	355	440	511	639	724	823	894	951	1064	1149	98	197	282	367	495	623	774				Anal. Trichokonine VI
	<b>Peptide 6*</b>	** AcU	A	U	A	U	G	Q	U	Vx	U	G	Lx	U	P	Vx	U	U	Q	Q	FOH	1922	1945	984	Nouveau
		128	199	284	355	440	497	625	710	809	894	951	1064	1149	98	197	282	367	495	623	774				Unique
	<b>Peptide 7*</b>	** Ac-U	A	U	A	U	A	Q	U	Vx	U	G	Vx	U	P	Vx	U	U	Q	Q	FOH	1922	1945	984	Nouveau
		128	199	284	355	440	511	639	724	823	908	965	1064	1149	98	197	282	367	495	623	774				Anal. Trichokonine VI
<b>Fraction 4</b>	<b>Peptide 8*</b>	Ac-U	A	U	A	U	A	Q	U	V	U	G	I	U	P	V	U	V	Q	Q	FOH	1950	1973	998	Nouveau
		128	199	284	355	440	511	639	724	823	908	965	1078	1163	98	197	282	380	508	636	788				Anal. Trichokonine VII
<b>Fraction 5</b>	<b>Peptide 9*</b>	Ac-U	A	U	A	U	U	Q	U	V	U	G	I	U	P	V	U	U	Q	Q	FOH	1950	1973	998	Nouveau
		128	199	284	355	440	525	653	738	837	922	979	1092	1177	98	197	282	367	495	623	774				Anal. Trichokonine VIII

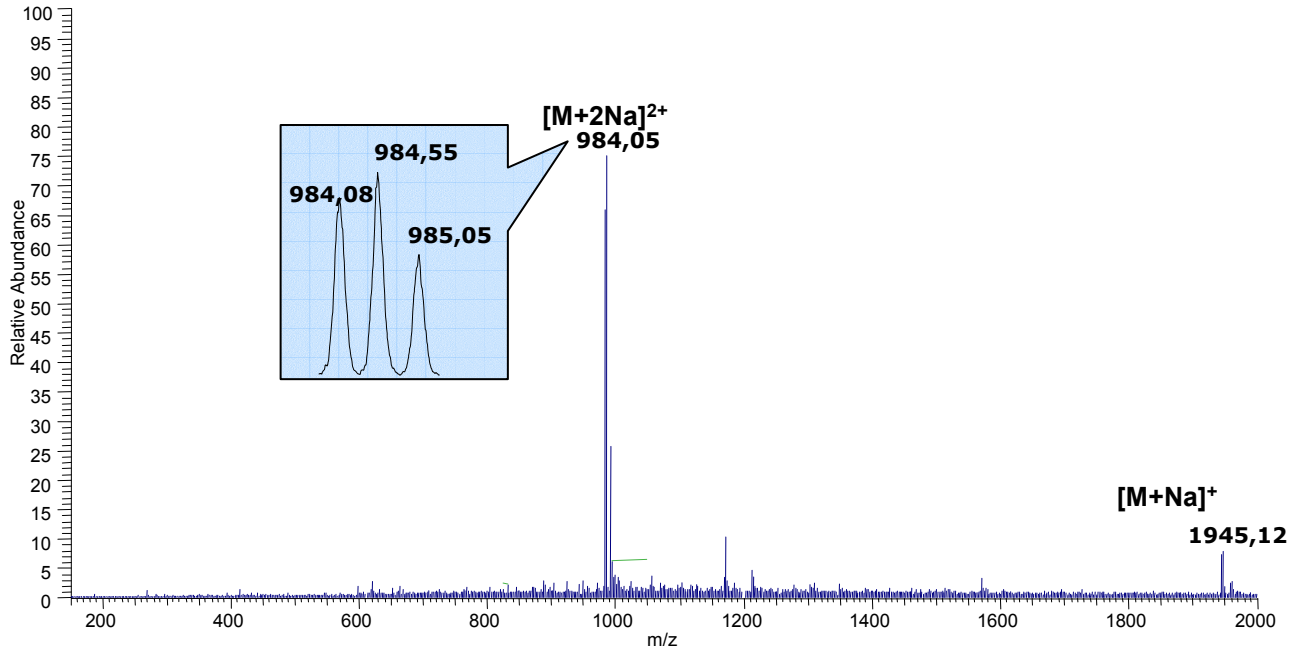
\* Nouvelle molécule

\*\* CPG invalidée

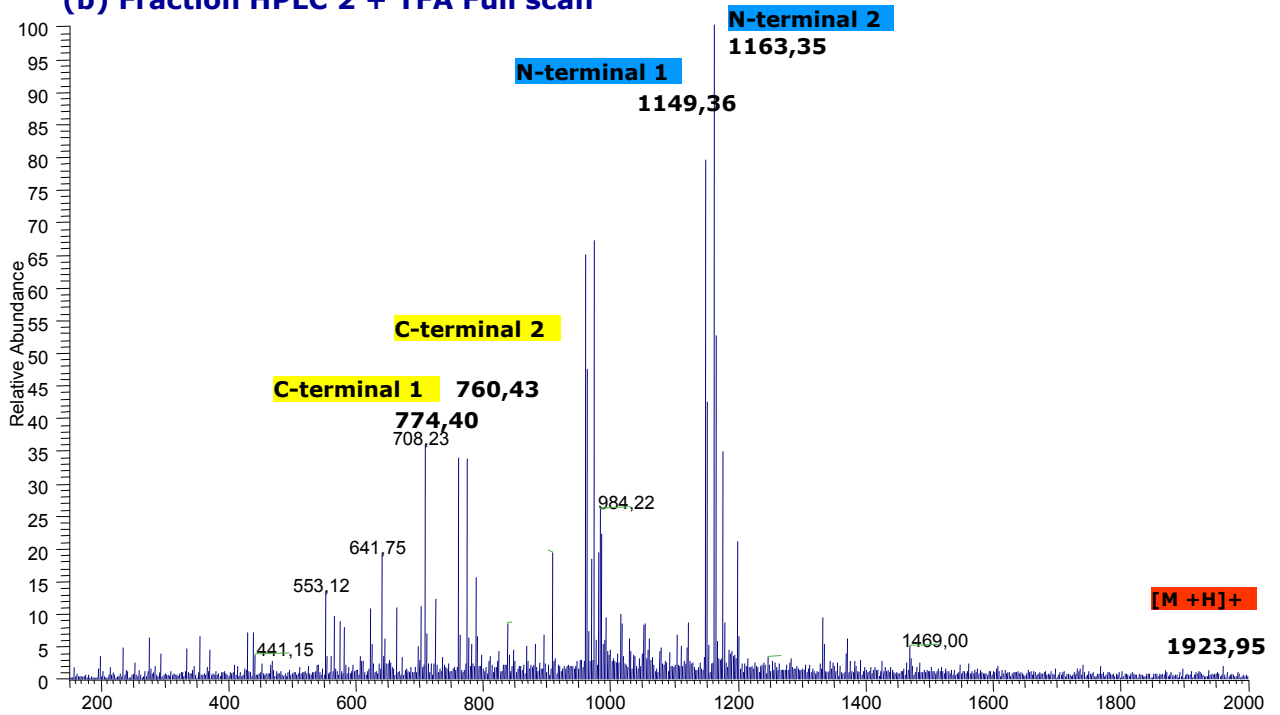
**Trichoderma Koningii Oudemans MMS 175**

<b>Peptide 2</b>	Ac-U	A	U	A	U	A	Q	U	V	A	G	L	U	P	V	U	U	Q	Q	FOH
	128	199	284	355	440	511	639	724	823	894	951	1064	1149	98	197	282	367	495	623	774
<b>Peptide 3</b>	Ac-U	A	U	A	A	A	Q	U	V	U	G	L	U	P	V	U	U	Q	Q	FOH
	128	199	284	355	426	497	625	710	809	894	951	1064	1149	98	197	282	367	495	623	774
<b>Peptide 4</b>	Ac-U	A	U	A	U	A	Q	U	V	U	G	L	U	P	V	U	A	Q	Q	FOH
	128	199	284	355	440	511	639	724	823	908	965	1078	1163	98	197	282	353	481	609	760

**(a) Fraction HPLC 2 sans acide Full scan**



**(b) Fraction HPLC 2 + TFA Full scan**

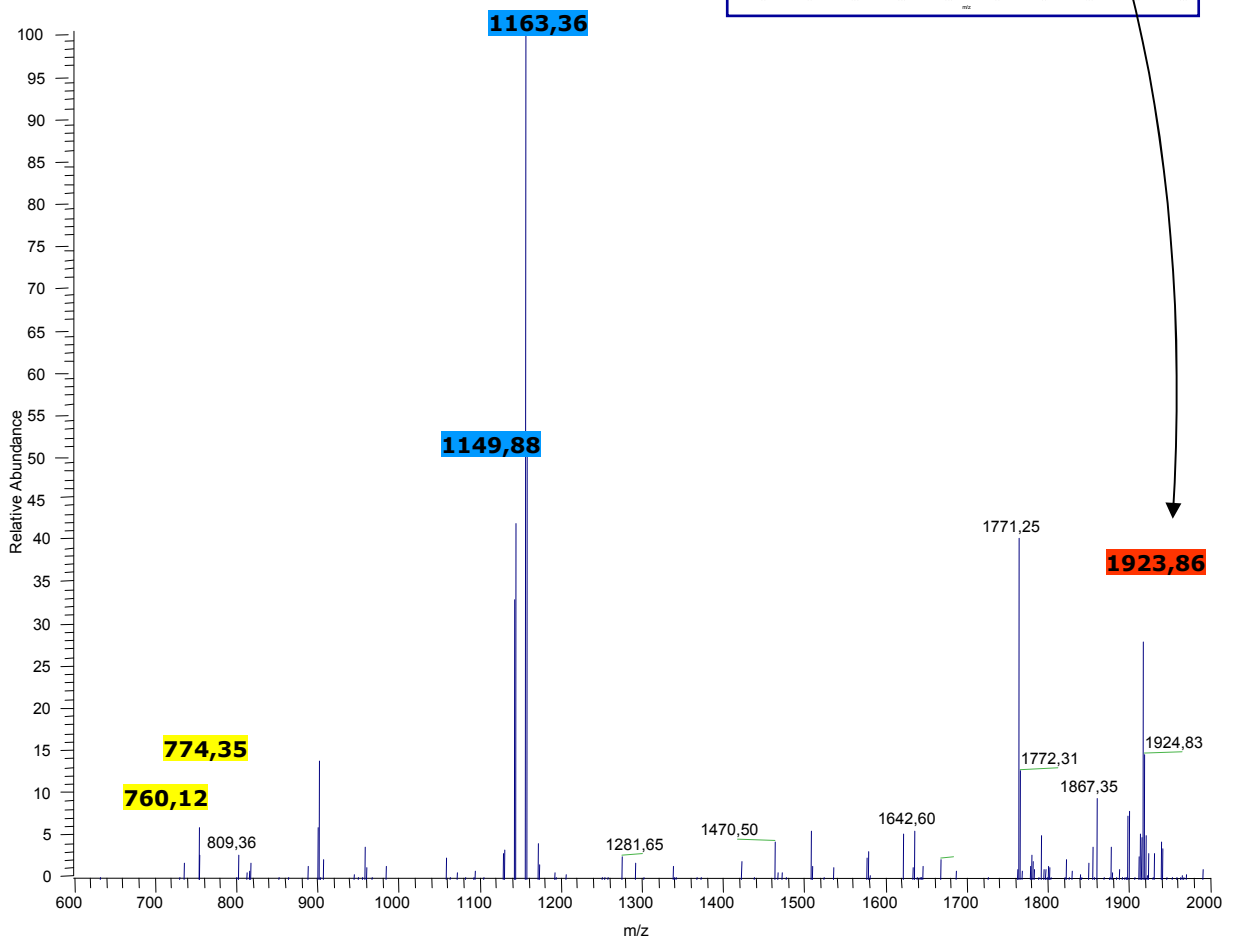


**Fig. 73 : Spectres SM en mode « full-scan » sans (a) et avec TFA (b) des peptides 2, 3 et 4 de la souche MMS 175.**

**Trichoderma Koningii Oudemans MMS 175**

<b>Peptide 2</b>	Ac-U	A	U	A	U	A	Q	U	V	A	G	L	U	P	V	U	U	Q	Q	FOH
	128	199	284	355	440	511	639	724	823	894	951	1064	1149	98	197	282	367	495	623	774
<b>Peptide 3</b>	Ac-U	A	U	A	A	A	Q	U	V	U	G	L	U	P	V	U	U	Q	Q	FOH
	128	199	284	355	426	497	625	710	809	894	951	1064	1149	98	197	282	367	495	623	774
<b>Peptide 4</b>	Ac-U	A	U	A	U	A	Q	U	V	U	G	L	U	P	V	U	A	Q	Q	FOH
	128	199	284	355	440	511	639	724	823	908	965	1078	1163	98	197	282	353	481	609	760

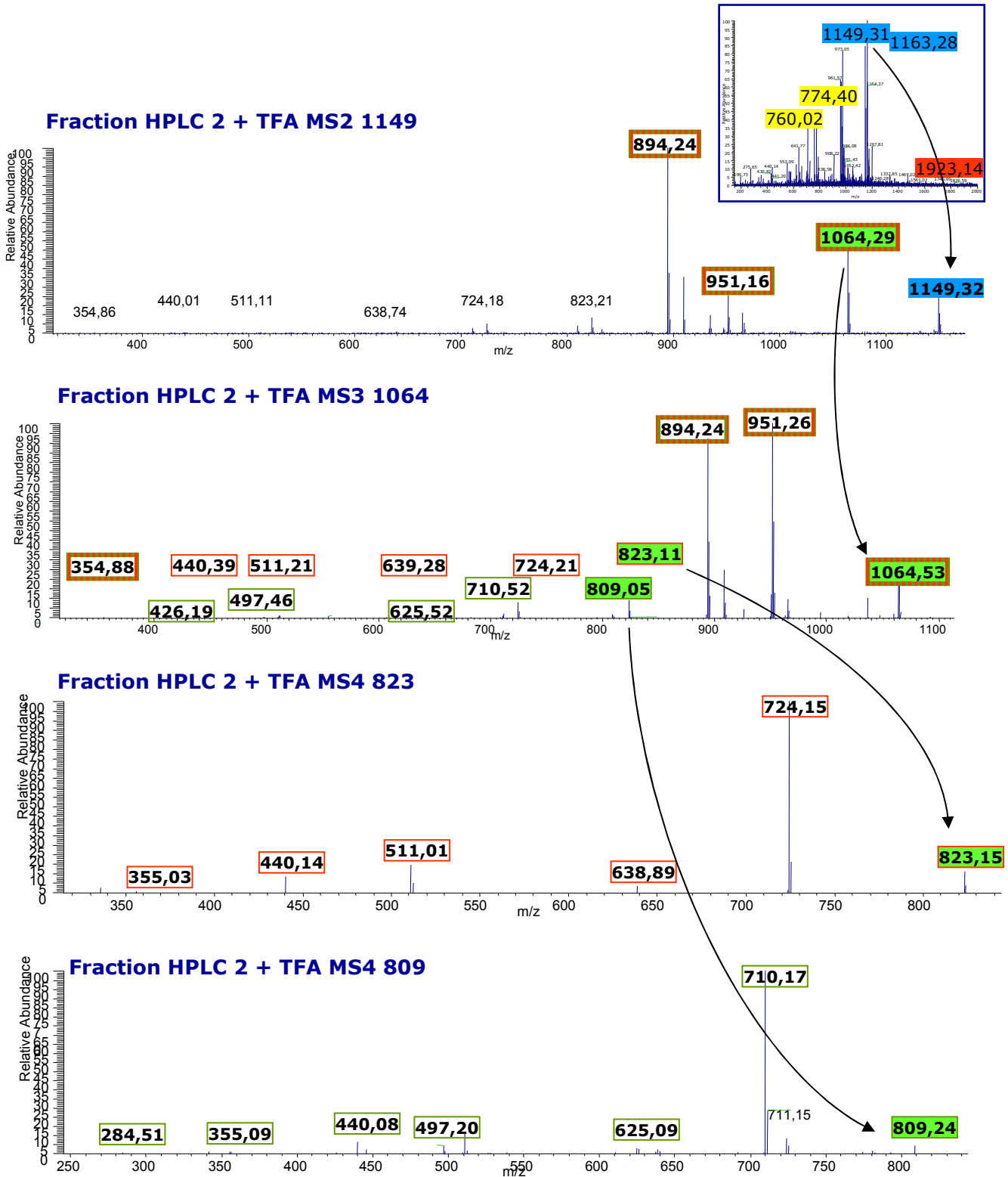
**Fraction HPLC 2 + TFA MS2 1922**



**Fig. 74 : Spectres SM<sup>2</sup> avec TFA des peptides 2, 3 et 4 de la souche MMS 175.**

**Trichoderma Koningii Oudemans MMS 175**

<b>Peptide 2</b>	Ac-U	A	U	A	U	A	Q	U	V	A	G	L	U	P	V	U	U	Q	Q	FOH
	128	199	284	355	440	511	639	724	823	894	951	1064	1149	98	197	282	367	495	623	774
<b>Peptide 3</b>	Ac-U	A	U	A	A	A	Q	U	V	U	G	L	U	P	V	U	U	Q	Q	FOH
	128	199	284	355	426	497	625	710	809	894	951	1064	1149	98	197	282	367	495	623	774

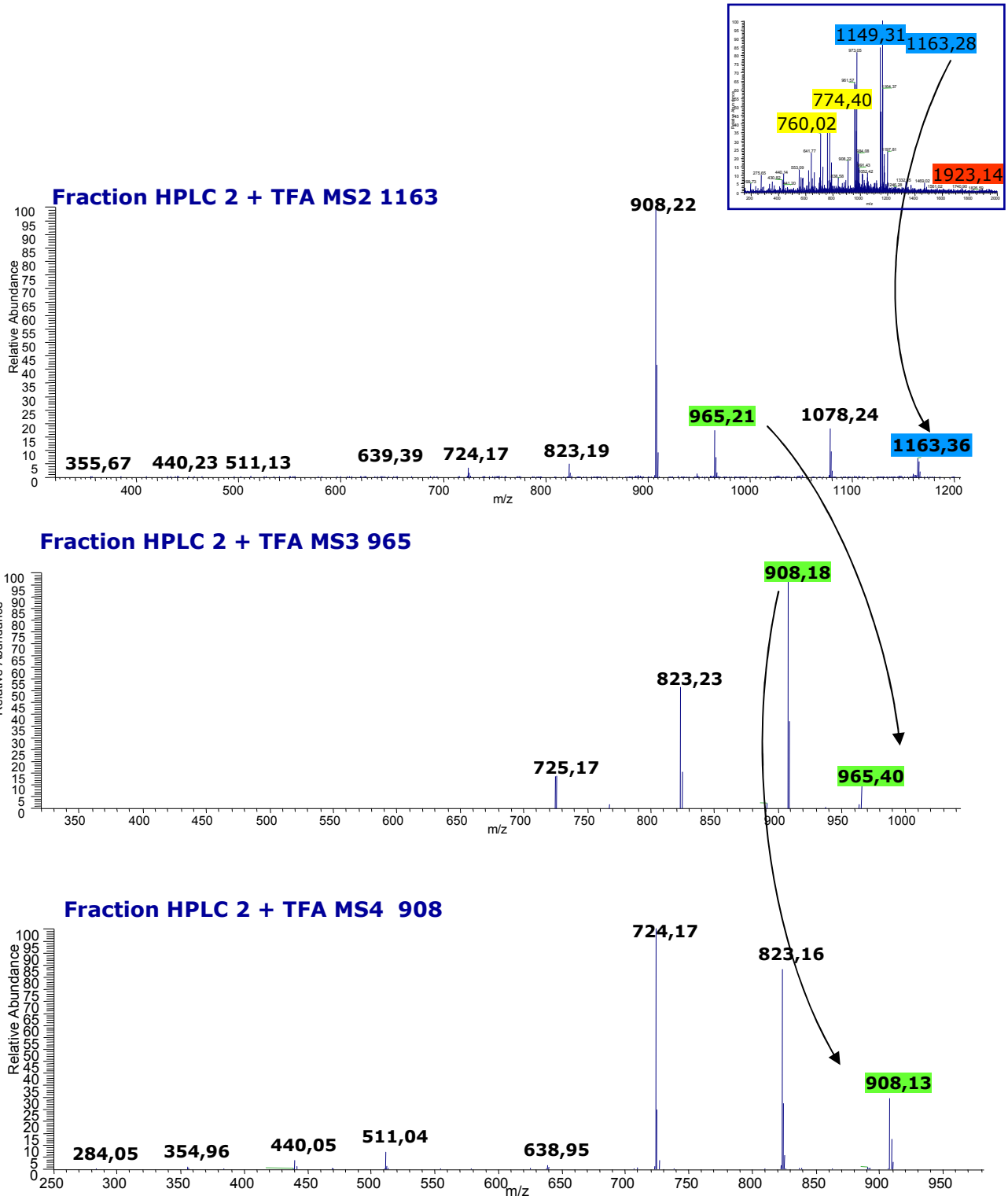


**Fig. 75 : Spectres SM<sup>n</sup> de la partie N-terminale des peptides 2 et 3 de la souche MMS 175.**

**Trichoderma Koningii Oudemans MMS 175**

**Peptide 4**

Ac-U	A	U	A	U	A	Q	U	V	U	G	L	U	P	V	U	A	Q	Q	FOH
128	199	284	355	440	511	639	724	823	908	965	1078	1163	98	197	282	353	481	609	760

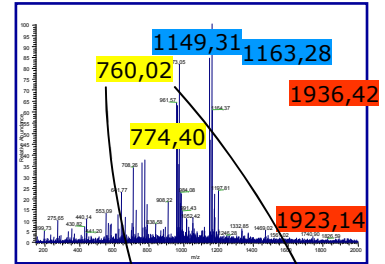


**Fig. 76 : Spectres SM<sup>n</sup> de la partie N-terminale du peptides 4 de la souche MMS 175.**

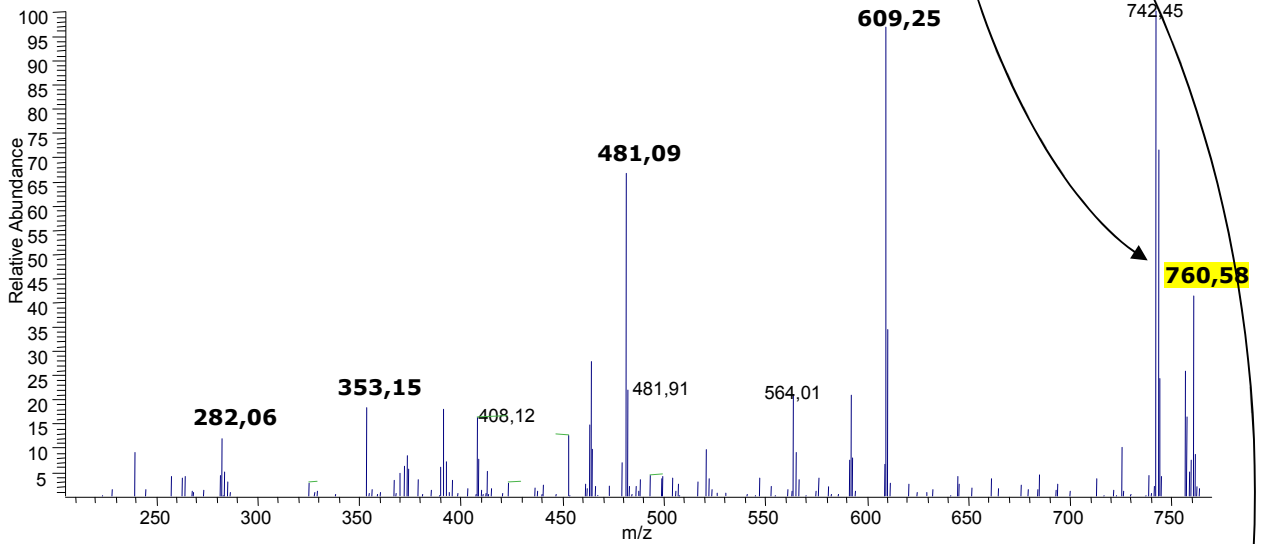


**Trichoderma Koningii Oudemans MMS 175**

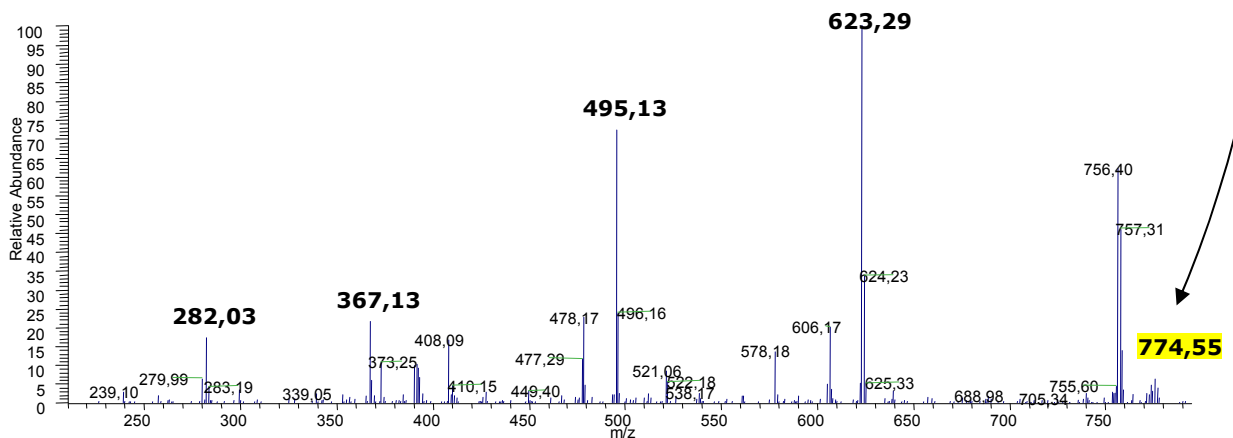
<b>Peptide 2</b>	Ac-U	A	U	A	U	A	Q	U	V	A	G	L	U	P	V	U	U	Q	Q	FOH
	128	199	284	355	440	511	639	724	823	894	951	1064	1149	98	197	282	367	495	623	774
<b>Peptide 3</b>	Ac-U	A	U	A	A	A	Q	U	V	U	G	L	U	P	V	U	U	Q	Q	FOH
	128	199	284	355	426	497	625	710	809	894	951	1064	1149	98	197	282	367	495	623	774
<b>Peptide 4</b>	Ac-U	A	U	A	U	A	Q	U	V	U	G	L	U	P	V	U	A	Q	Q	FOH
	128	199	284	355	440	511	639	724	823	908	965	1078	1163	98	197	282	353	481	609	760



**Fraction HPLC 2 + TFA MS2 760**



**Fraction HPLC 2 + TFA MS2 774**

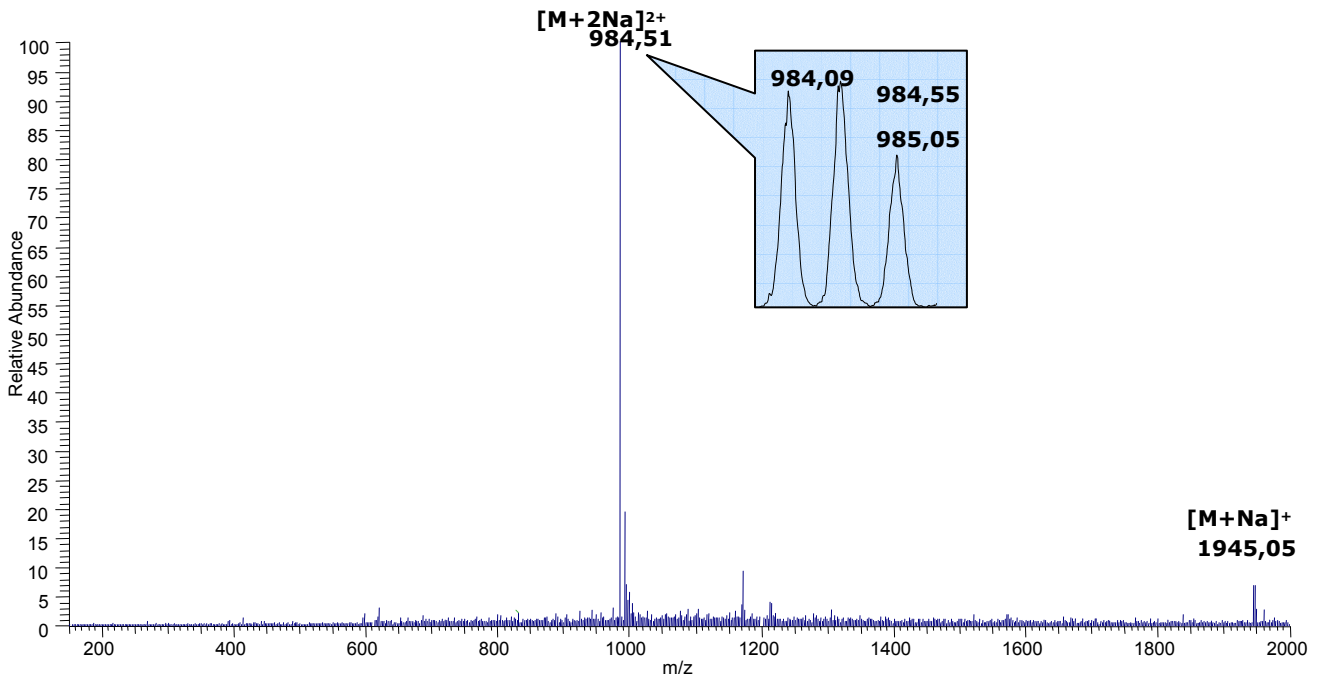


**Fig. 77 : Spectres SM<sup>n</sup> de la partie C-terminale des peptides 2, 3 et 4 de la souche MMS 175.**

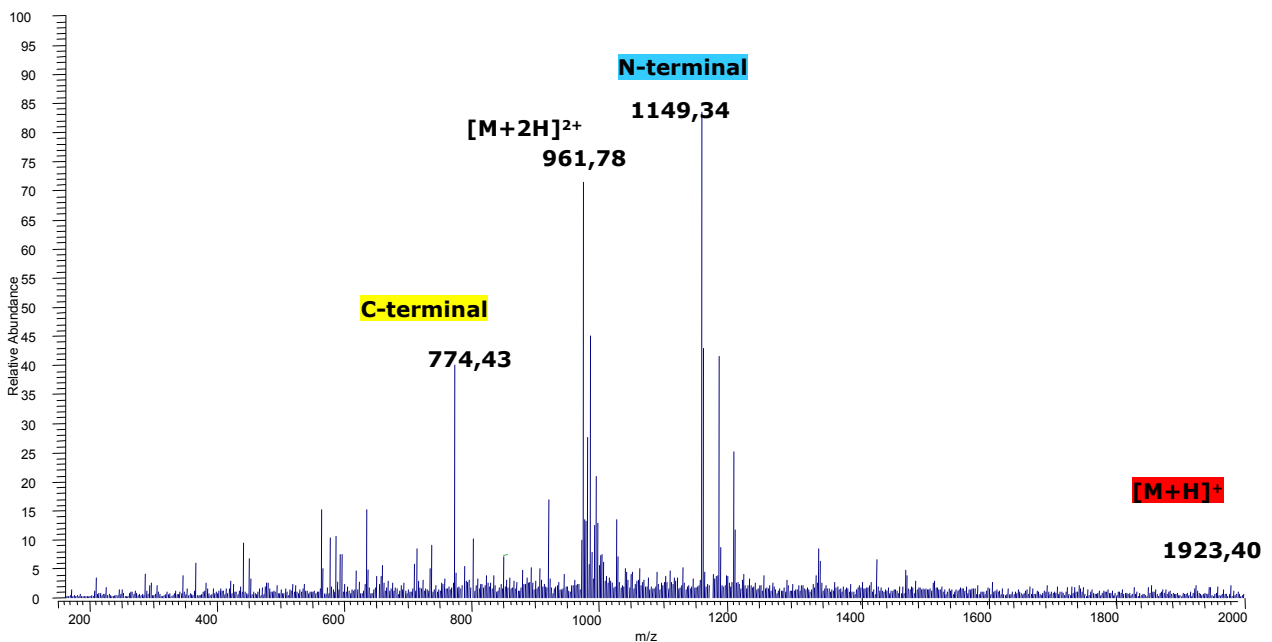
**Trichoderma Koningii Oudemans MMS 175**

<b>Peptide 5</b>	Ac-U	A	U	A	U	A	Q	U	Vx	A	G	Lx	U	P	Vx	U	U	Q	Q	FOH
	128	199	284	355	440	511	639	724	823	894	951	1064	1149	98	197	282	367	495	623	774
<b>Peptide 6</b>	AcU	A	A	U	G	Q	U	Vx	U	U	G	Lx	U	P	Vx	U	U	Q	Q	FOH
	128	199	284	355	440	497	625	710	809	894	951	1064	1149	98	197	282	367	495	623	774
<b>Peptide 7</b>	Ac-U	A	U	A	U	A	Q	U	Vx	U	G	Vx	U	P	Vx	U	U	Q	Q	FOH
	128	199	284	355	440	511	639	724	823	908	965	1064	1149	98	197	282	367	495	623	774

**(a) Fraction HPLC 3 sans TFA Full scan**



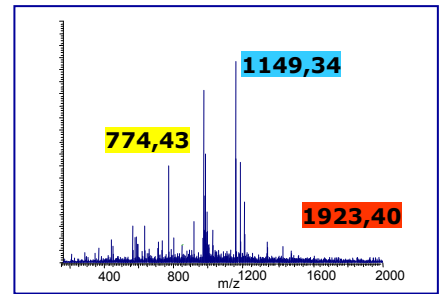
**(b) Fraction HPLC 3 + TFA Full scan**



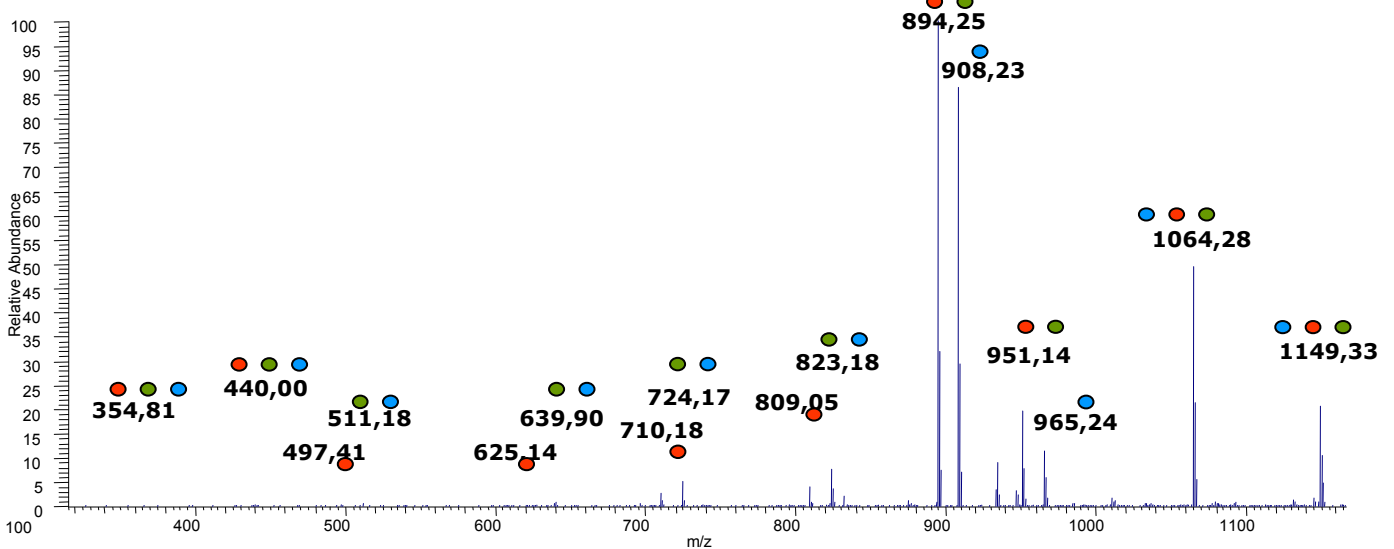
**Fig. 78 : Spectres SM en mode « full-scan » sans (a) et avec TFA (b) des peptides 5, 6 et 7 de la souche MMS 175.**

**Trichoderma Koningii Oudemans MMS 175**

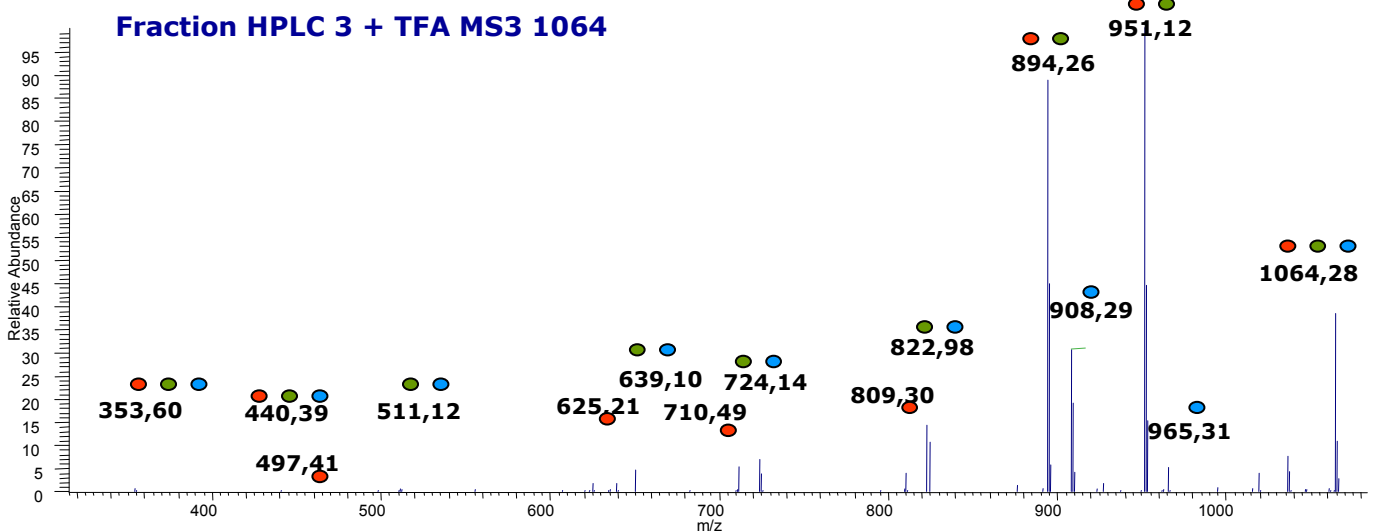
<b>Peptide 5</b>	Ac-U	A	U	A	U	A	Q	U	Vx	A	G	Lx	U	P	Vx	U	U	Q	Q	FOH
	128	199	284	355	440	511	639	724	823	894	951	1064	1149	98	197	282	367	495	623	774
<b>Peptide 6</b>	AcU	A	A	U	G	Q	U	Vx	U	U	G	Lx	U	P	Vx	U	U	Q	Q	FOH
	128	199	284	355	440	497	625	710	809	894	951	1064	1149	98	197	282	367	495	623	774
<b>Peptide 7</b>	Ac-U	A	U	A	U	A	Q	U	Vx	U	G	Vx	U	P	Vx	U	U	Q	Q	FOH
	128	199	284	355	440	511	639	724	823	908	965	1064	1149	98	197	282	367	495	623	774



**Fraction HPLC 3 + TFA MS2 1149**



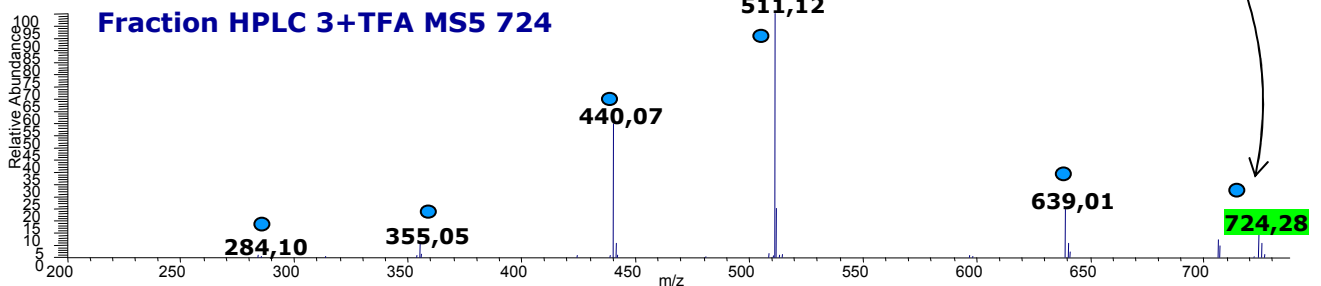
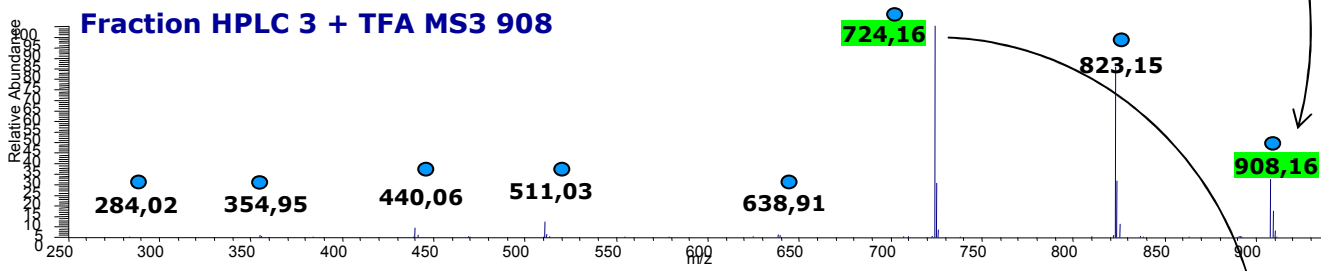
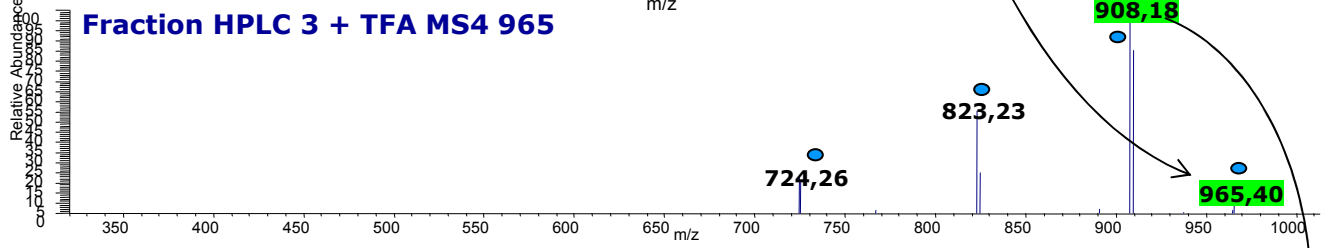
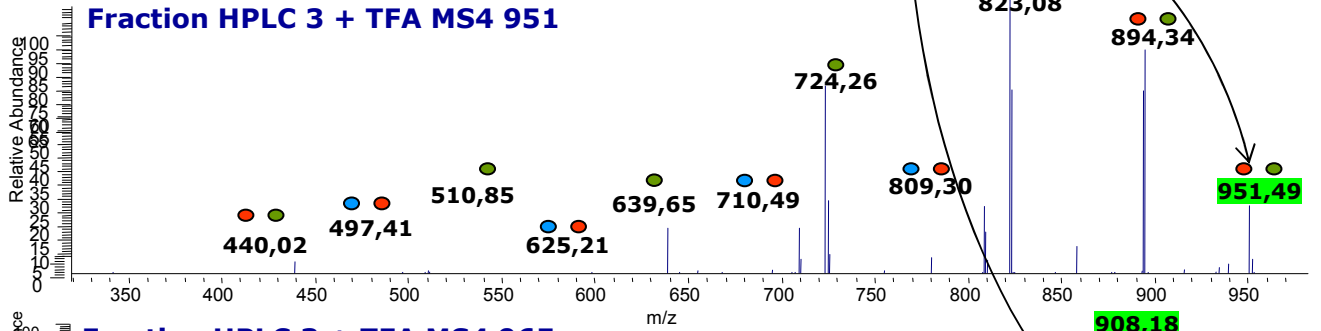
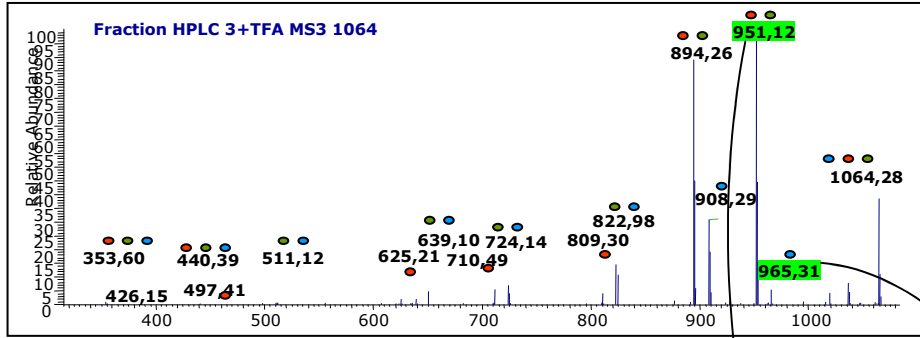
**Fraction HPLC 3 + TFA MS3 1064**



**Fig. 79 : Spectres SM<sup>n</sup> de la partie N-terminale des peptides 5, 6 et 7 de la souche MMS 175.**

**Trichoderma Koningii Oudemans MMS 175**

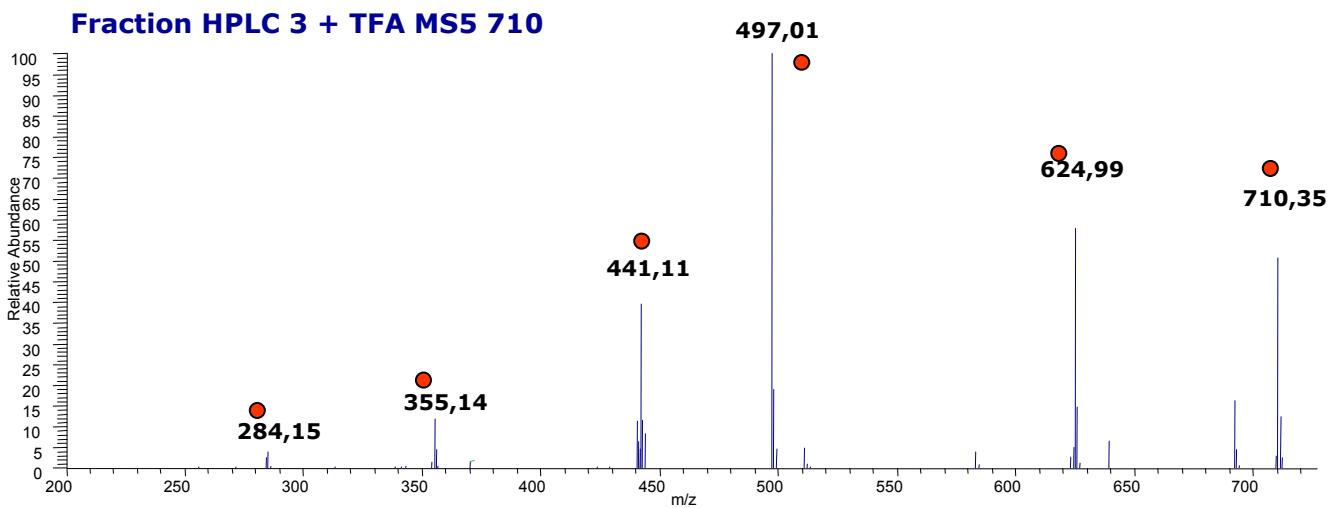
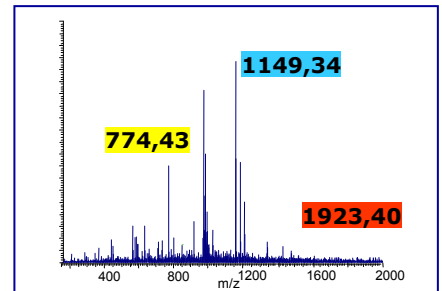
<b>Peptide 5</b>	Ac-U	A	U	A	U	A	Q	U	Vx	A	G	Lx	U	P	Vx	U	U	Q	Q	FOH
	128	199	284	355	440	511	639	724	823	894	951	1064	1149	98	197	282	367	495	623	774
<b>Peptide 6</b>	AcU	A	A	U	G	Q	U	Vx	U	U	G	Lx	U	P	Vx	U	U	Q	Q	FOH
	128	199	284	355	440	497	625	710	809	894	951	1064	1149	98	197	282	367	495	623	774
<b>Peptide 7</b>	Ac-U	A	U	A	U	A	Q	U	Vx	U	G	Vx	U	P	Vx	U	U	Q	Q	FOH
	128	199	284	355	440	511	639	724	823	908	965	1064	1149	98	197	282	367	495	623	774



**Fig. 80 : Spectres SM<sup>n</sup> de la partie N-terminale des peptides 5, 6 et 7 de la souche MMS 175.**

**Trichoderma Koningii Oudemans MMS 175**

<b>Peptide 5</b>	Ac-U	A	U	A	U	A	Q	U	Vx	A	G	Lx	U	P	Vx	U	U	Q	Q	FOH
	128	199	284	355	440	511	639	724	823	894	951	1064	1149	98	197	282	367	495	623	774
<b>Peptide 6</b>	AcU	A	A	U	G	Q	U	Vx	U	U	G	Lx	U	P	Vx	U	U	Q	Q	FOH
	128	199	284	355	440	497	625	710	809	894	951	1064	1149	98	197	282	367	495	623	774
<b>Peptide 7</b>	Ac-U	A	U	A	U	A	Q	U	Vx	U	G	Vx	U	P	Vx	U	U	Q	Q	FOH
	128	199	284	355	440	511	639	724	823	908	965	1064	1149	98	197	282	367	495	623	774

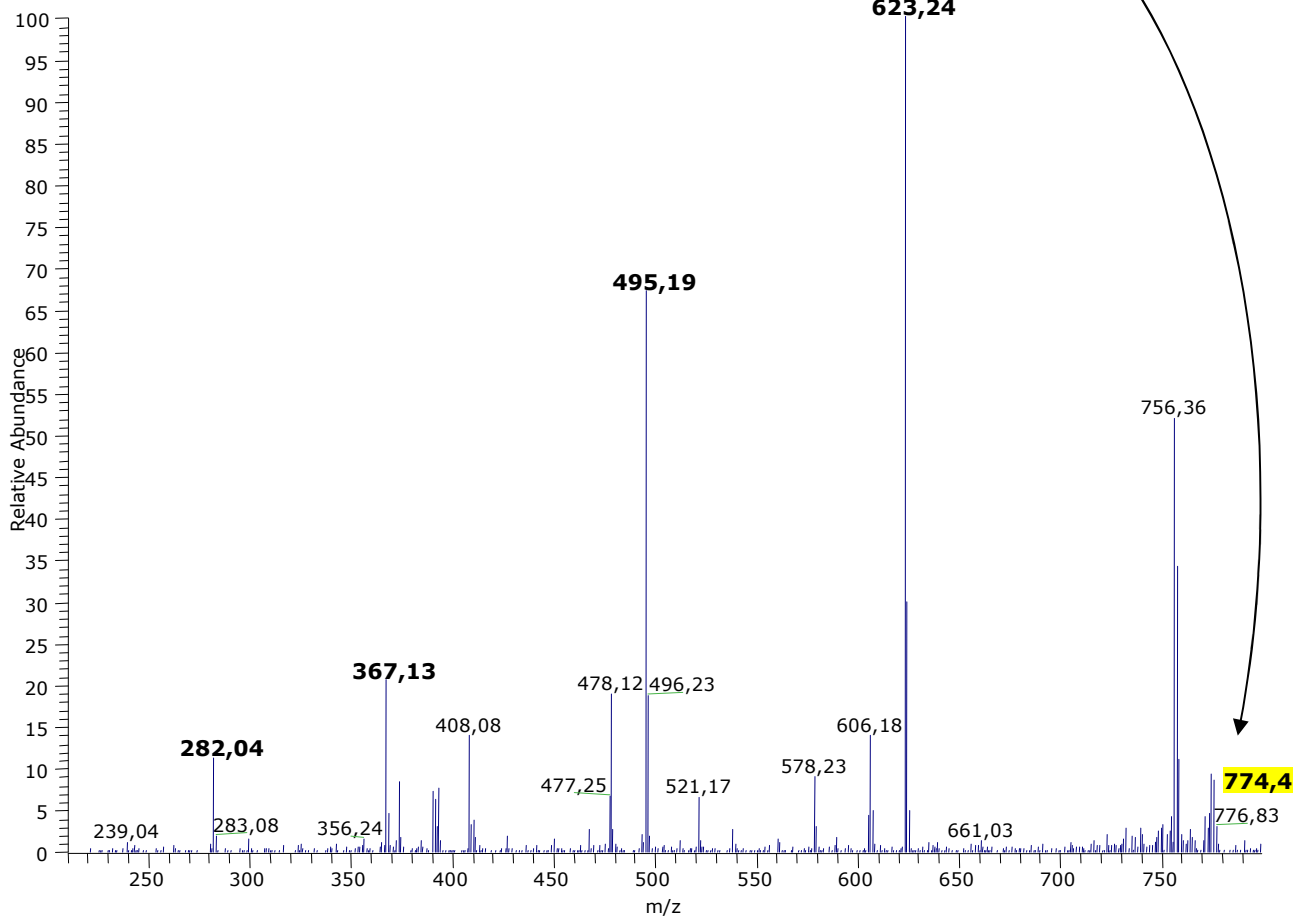


**Fig. 81 : Spectre SM<sup>n</sup> de la partie N-terminale des peptides 5, 6 et 7 de la souche MMS 175.**

**Trichoderma Koningii Oudemans MMS 175**

<b>Peptide 5</b>	Ac-U	A	U	A	U	A	Q	U	Vx	A	G	Lx	U	P	Vx	U	U	Q	Q	FOH
	128	199	284	355	440	511	639	724	823	894	951	1064	1149	98	197	282	367	495	623	774
<b>Peptide 6</b>	AcU	A	A	U	G	Q	U	Vx	U	U	G	Lx	U	P	Vx	U	U	Q	Q	FOH
	128	199	284	355	440	497	625	710	809	894	951	1064	1149	98	197	282	367	495	623	774
<b>Peptide 7</b>	Ac-U	A	U	A	U	A	Q	U	Vx	U	G	Vx	U	P	Vx	U	U	Q	Q	FOH
	128	199	284	355	440	511	639	724	823	908	965	1064	1149	98	197	282	367	495	623	774

**Fraction HPLC 3 + TFA MS2 774**



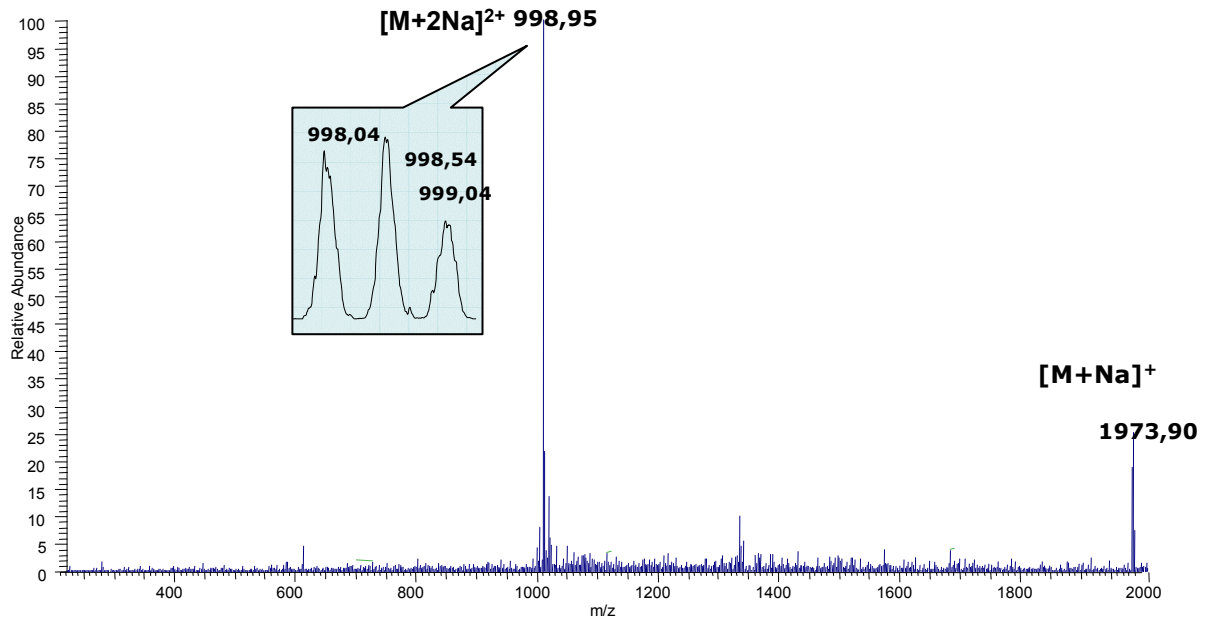
**Fig. 82 : Spectres SM<sup>n</sup> de la partie C-terminale du peptide 5, 6 et 7 de la souche MMS 175.**

**Trichoderma Koningii Oudemans MMS 175**

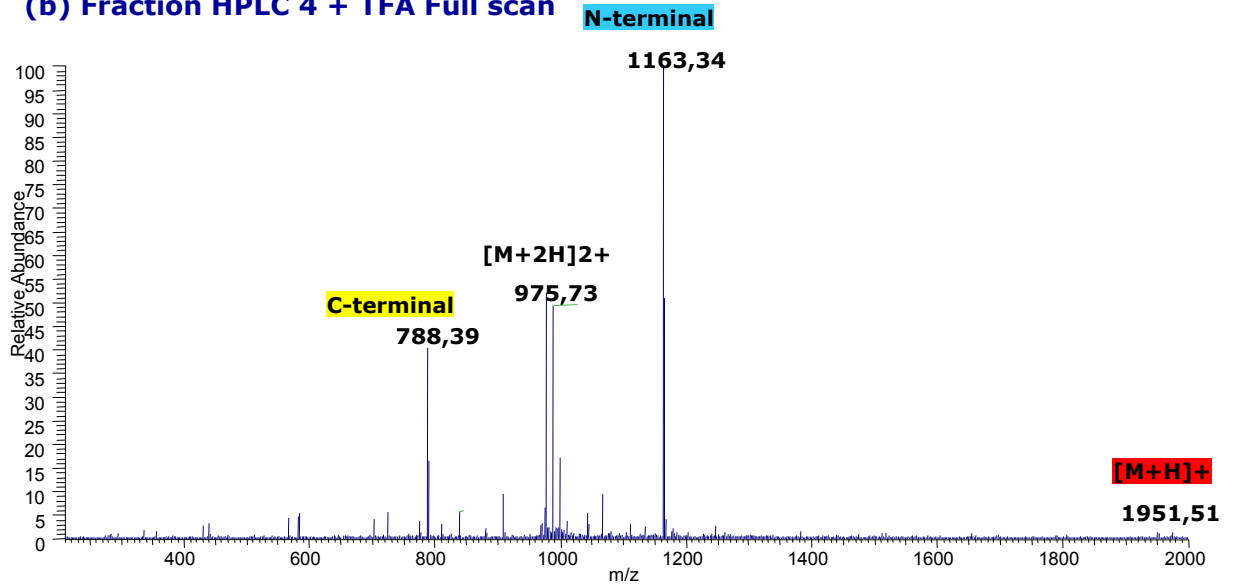
**Peptide 8**

Ac-U	A	U	A	U	A	Q	U	V	U	G	I	U	P	V	U	V	Q	Q	FOH
128	199	284	355	440	511	639	724	823	908	965	1078	1163	97	196	281	380	508	636	788

**(a) Fraction HPLC 4 sans TFA Full scan**



**(b) Fraction HPLC 4 + TFA Full scan**



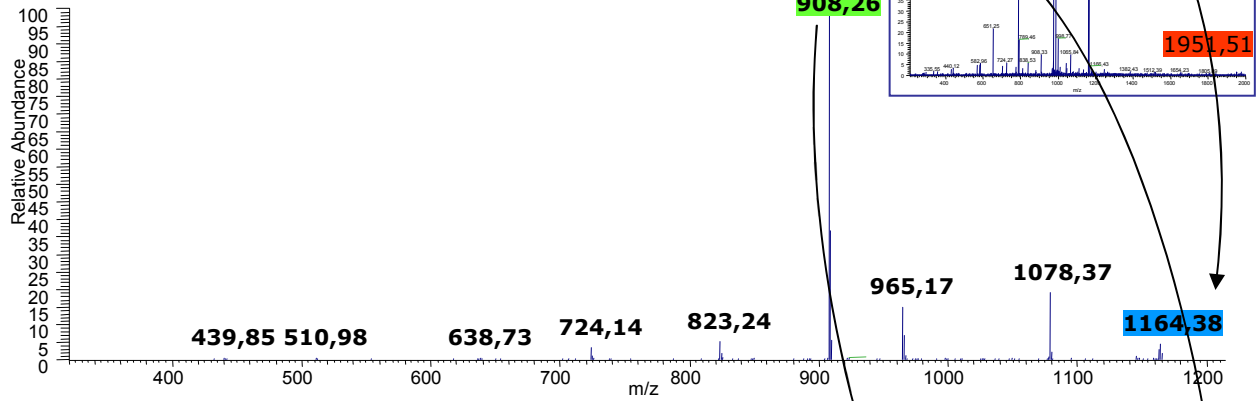
**Fig. 83 : Spectres SM en mode « full-scan » sans (a) et avec TFA (b) du peptide 8 de la souche MMS 175.**

**Trichoderma Koningii Oudemans MMS 175**

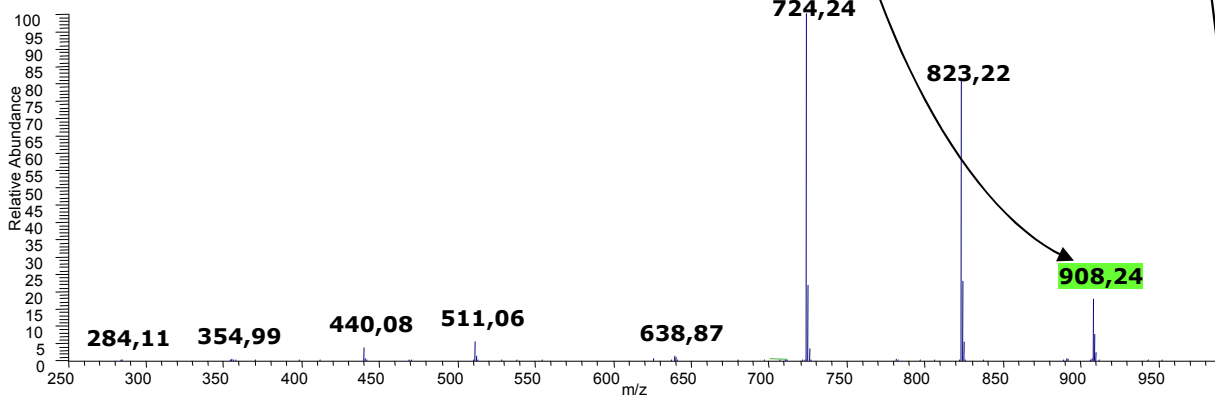
**Peptide 8**

Ac-U	A	U	A	U	A	Q	U	V	U	G	I	U	P	V	U	V	Q	Q	FOH
128	199	284	355	440	511	639	724	823	908	965	1078	1163	97	196	281	380	508	636	788

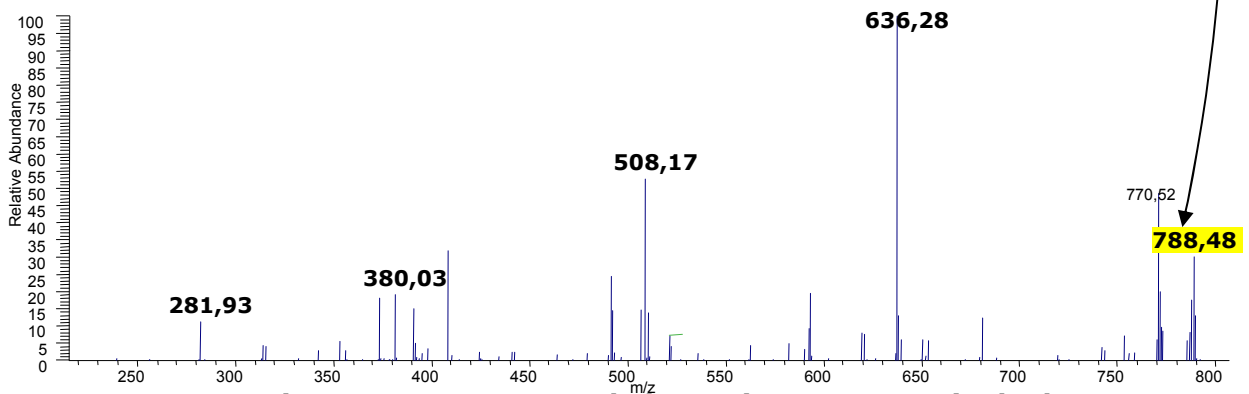
**Fraction HPLC 5 + TFA MS2 1163**



**Fraction HPLC 5 + TFA MS3 908**



**Fraction HPLC opt5 + TFA MS2 788**



**Fig. 84 : Spectres SM<sup>n</sup> de la partie N et C-terminale du peptide 8 de la souche MMS 175.**

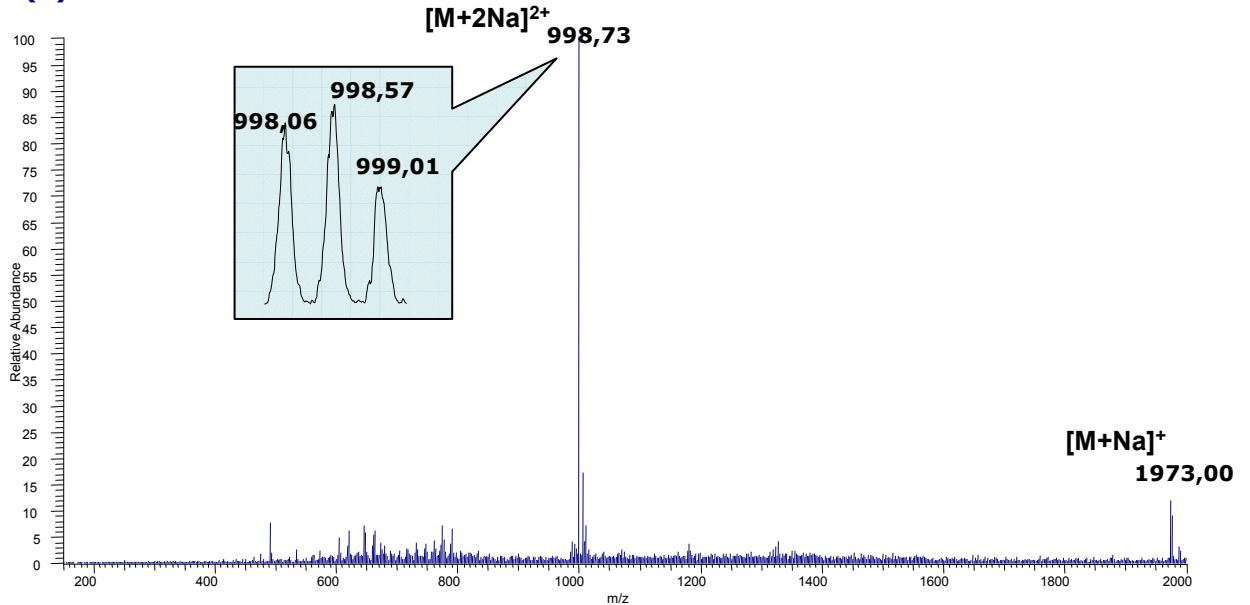


**Trichoderma Koningii Oudemans MMS 175**

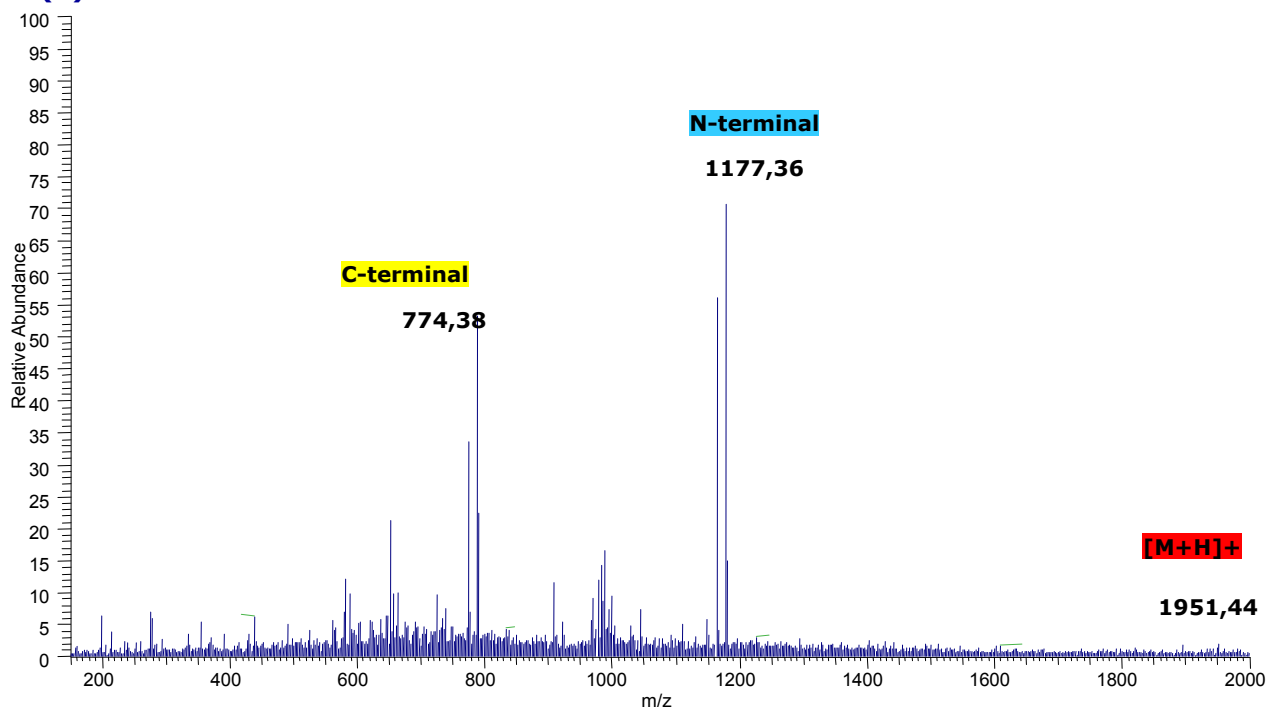
**Peptide 9**

Ac-U A U A U U Q U V U G I U P V U U Q Q FOH  
 128 199 284 355 440 525 653 738 837 922 979 1092 1177 97 196 281 366 494 622 774

**(a) Fraction HPLC 6 sans acide Full scan**



**(b) Fraction HPLC 6 + TFA Full scan**

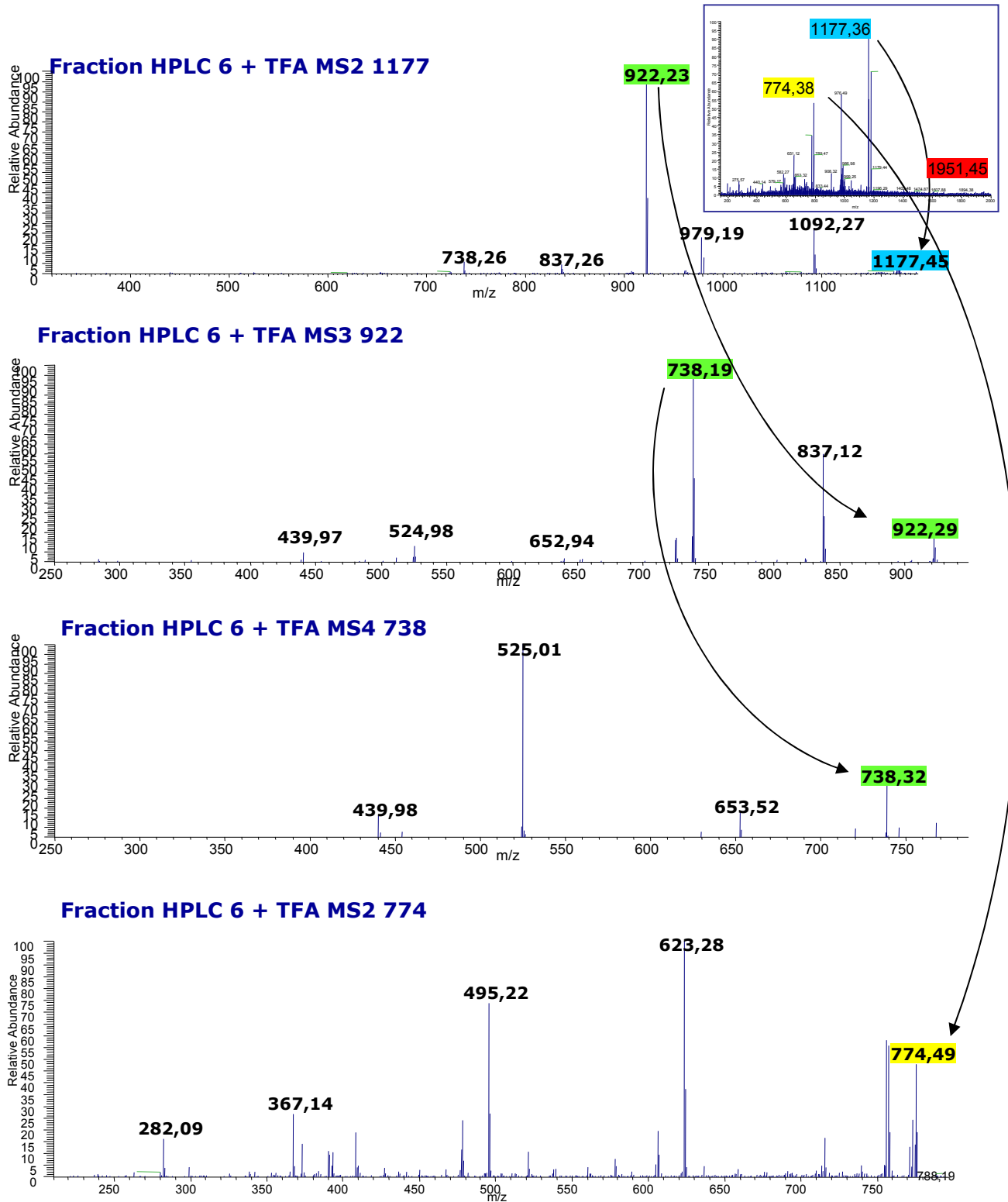


**Fig. 85 : Spectres SM en mode « full-scan » sans (a) et avec TFA (b) du peptide 9 de la souche MMS 175.**

**Trichoderma Koningii Oudemans MMS 175**

**Peptide 9**

Ac-U A U A U U Q U V U G I U P V U U Q Q FOH  
 128 199 284 355 440 525 653 738 837 922 979 1092 1177 97 196 281 366 494 622 774



**Fig. 86 : Spectres SM<sup>n</sup> de la partie N et C-terminale du peptide 9 de la souche MMS 175.**

**T. section longibrachiatum MMS 204**

**Tableau 18 : Séquences, masses moléculaires, masse des adduits Na, des ions bichargés, noms et analogie des peptaïbols identifiés chez la souche MMS 204**

		Partie N terminale													Partie C terminale H+										
Position		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Mw	[M+Na] <sup>+</sup>	[M+2Na] <sup>2+</sup>	Nom commun
<b>Fraction 2</b>	Peptide 1*	Ac-U	A	U	A	A	A	Q	U	V	U	G	L	U	P	V	U	U	Q	Q	FOH	1922	1945	984	Nouveau
		128	199	284	355	426	497	625	710	809	894	951	1064	1149	98	197	282	367	495	623	774				Anal. Trichokonine VI
	Peptide 2	Ac-U	A	U	A	U	A	Q	U	U	U	G	L	U	P	V	U	U	Q	Q	FOH	1922	1945	984	Suzukacilline
		128	199	284	355	440	511	639	724	809	894	951	1064	1149	98	197	282	367	495	623	774				
<b>Fraction 3</b>	Peptide 3* **	Ac-U	A	U	A	U	A	Q	U	Vx	U	G	Lx	U	P	Vx	U	A	Q	Q	FOH	1922	1945	984	Nouveau
		128	199	284	355	440	511	639	724	823	908	965	1078	1163	98	197	282	353	481	609	760				Anal. Trichokonine VII
<b>Fraction 4</b>	Peptide 4	Ac-U	A	U	A	U	A	Q	U	V	U	G	L	U	P	V	U	U	Q	Q	FOH	1936	1959	991	Trichokonine VI
		128	199	284	355	440	511	639	724	823	908	965	1078	1163	98	197	282	367	495	623	774				
<b>Fraction 5</b>	Peptide 5	Ac-U	A	U	A	U	A	Q	U	V	U	G	L	U	P	V	U	V	Q	Q	FOH	1950	1973	998	Trichokonine VII
		128	199	284	355	440	511	639	724	823	908	965	1078	1163	98	197	282	381	509	637	788				

\* Nouvelle molécule

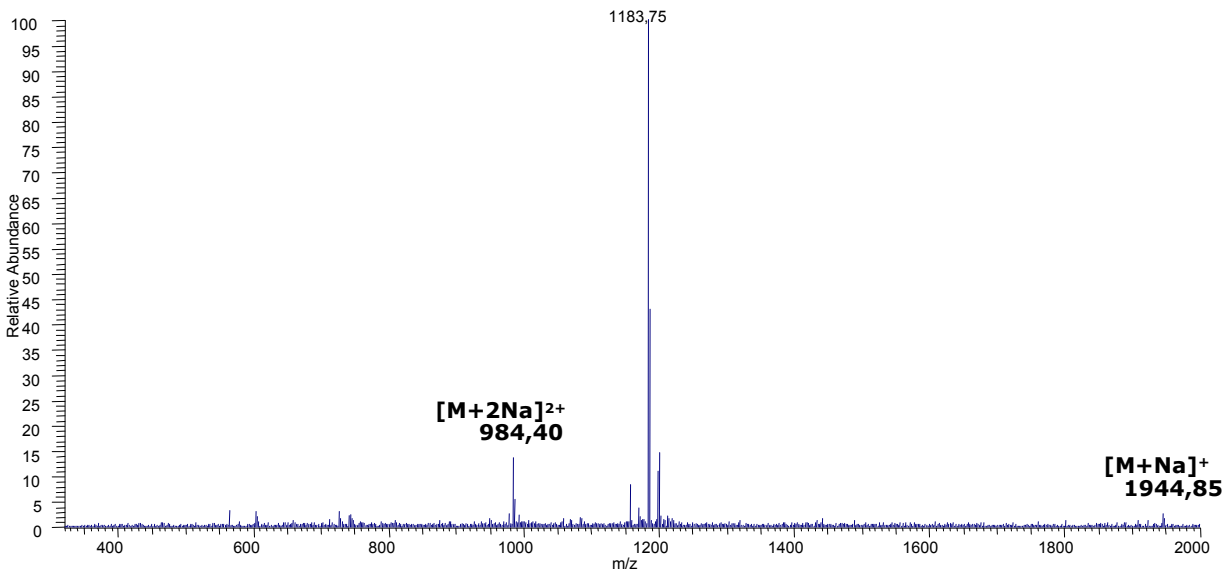
\*\* CPG invalidée

**Trichoderma section longibrachiatum MMS 204**

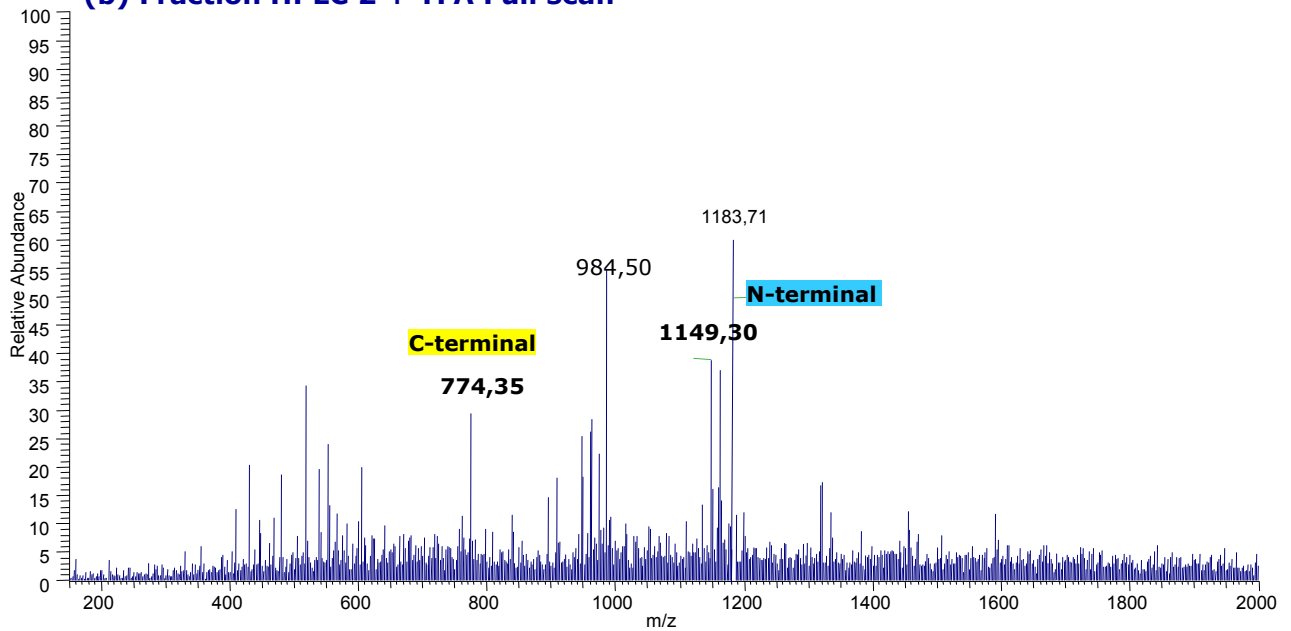
**Peptide 1**

Ac-U	A	U	A	A	A	Q	U	V	U	G	L	U	P	V	U	U	Q	Q	
128	199	284	355	426	497	625	710	809	894	951	1064	1149	98	197	282	367	495	623	774

**(a) Fraction HPLC 2 sans TFA Full scan**



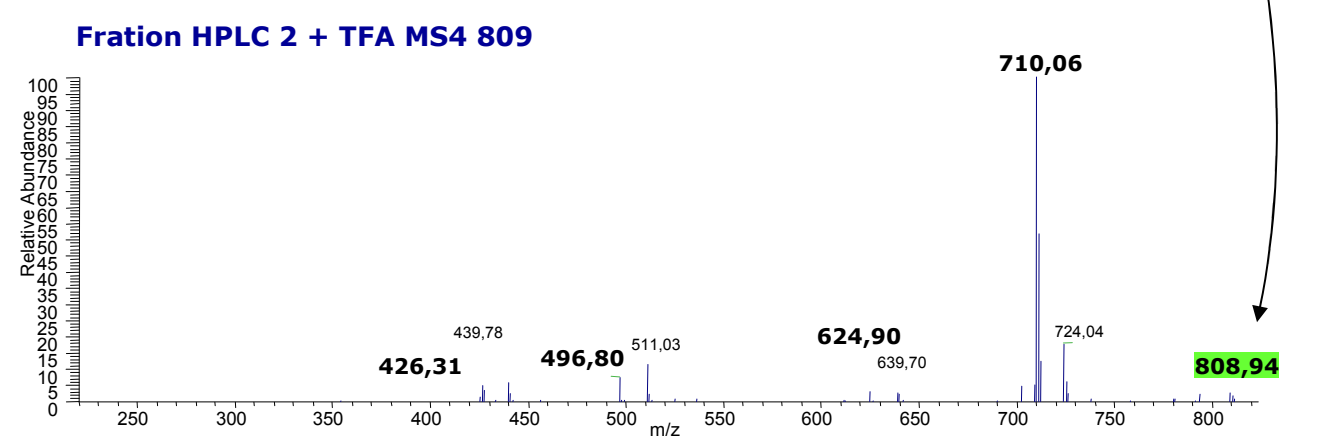
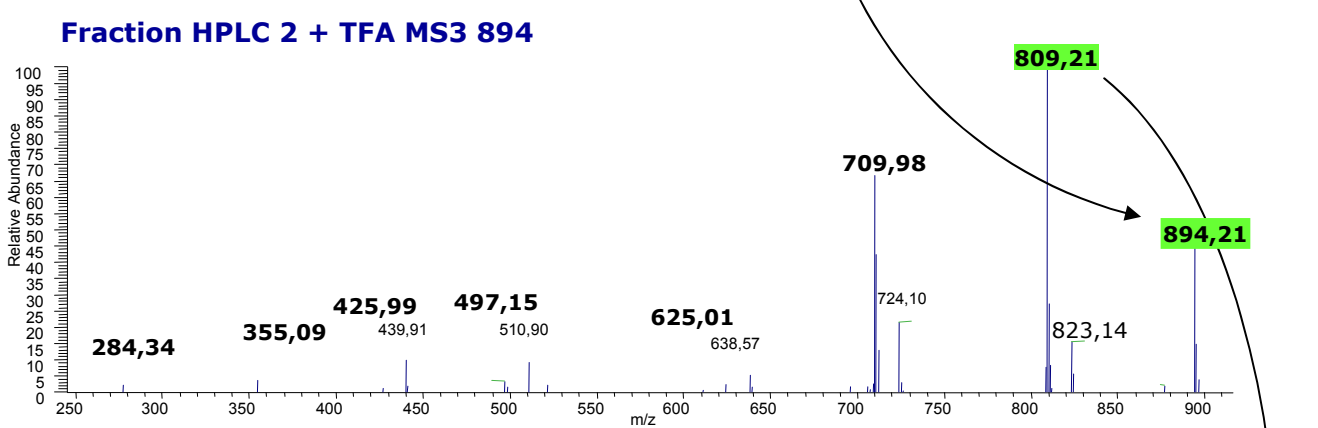
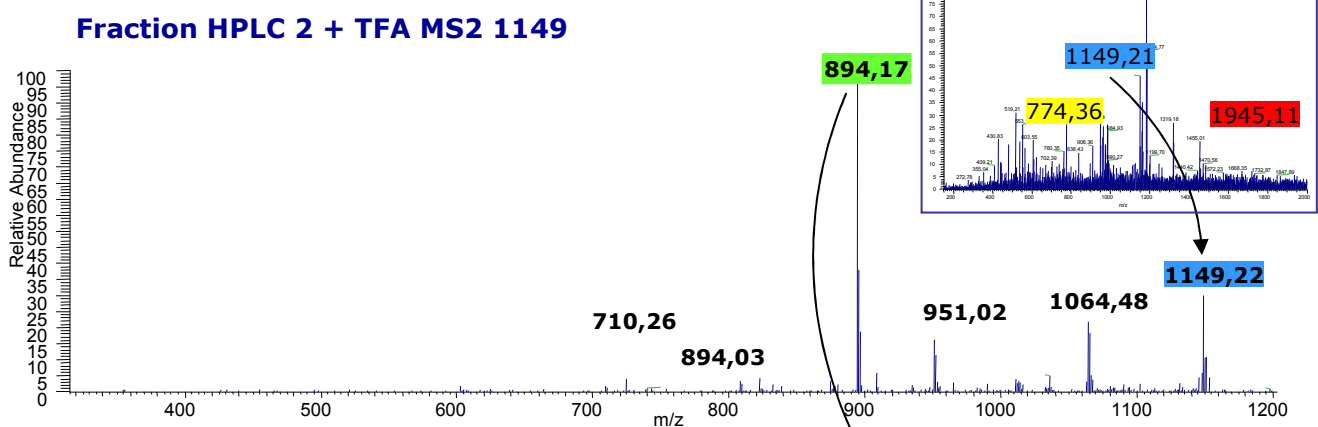
**(b) Fraction HPLC 2 + TFA Full scan**



**Fig. 87 : Spectres SM en mode « full-scan » sans (a) et avec TFA (b) du peptide 1 de la souche MMS 204.**

**Trichoderma section longibrachiatum MMS 204**

**Peptide 1** Ac-U A U A A A Q U V U G L U P V U U Q Q  
 128 199 284 355 426 497 625 710 809 894 951 1064 1149 98 197 282 367 495 623 774

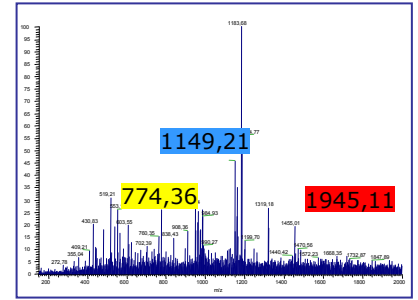


**Fig. 88 : Spectres SM<sup>n</sup> de la partie N-terminale du peptide 1 de la souche MMS 204.**

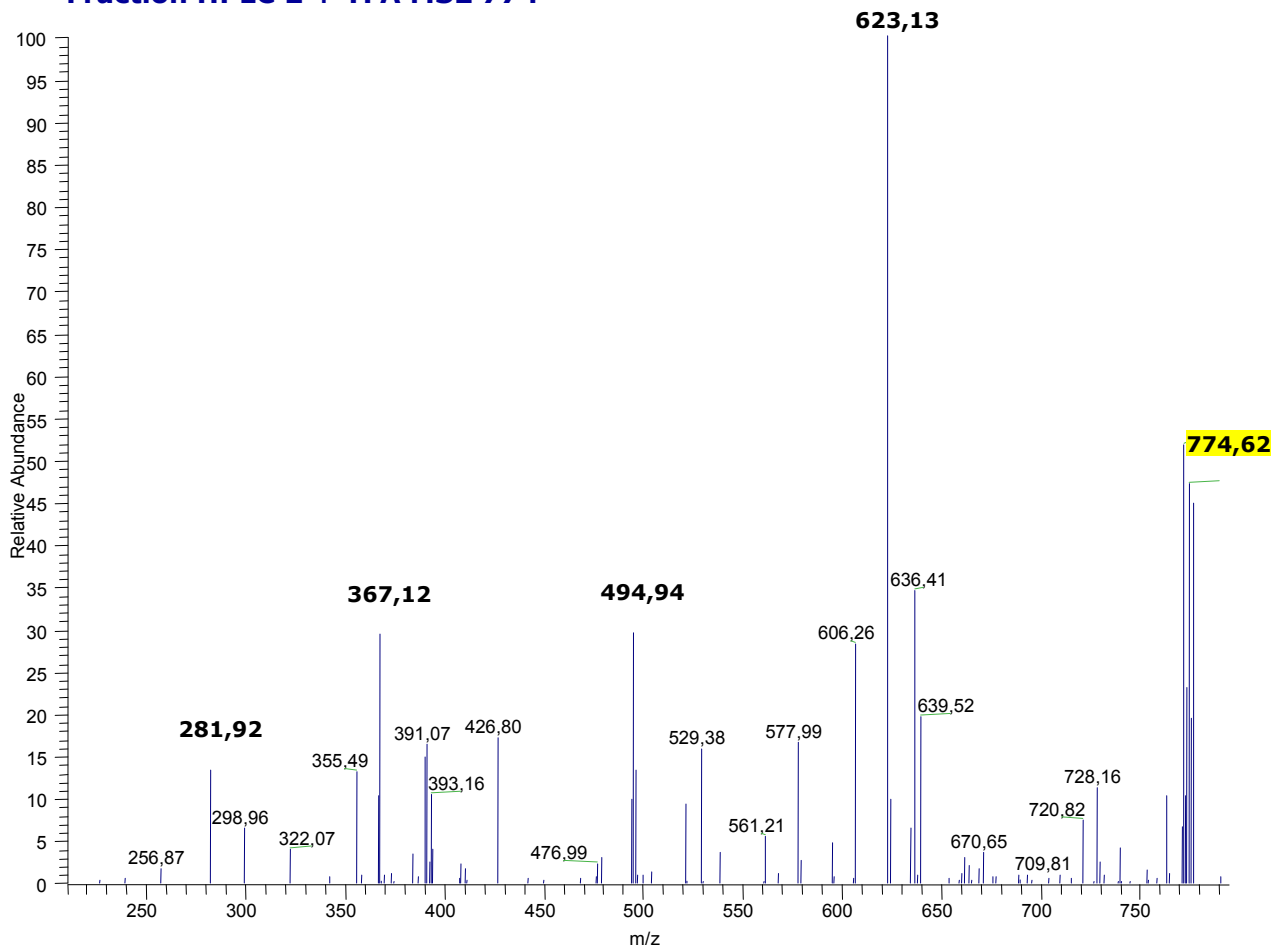
**Trichoderma section longibrachiatum MMS 204**

**Peptide 1**

Ac-U	A	U	A	A	A	Q	U	V	U	G	L	U	P	V	U	U	Q	Q	
128	199	284	355	426	497	625	710	809	894	951	1064	1149	98	197	282	367	495	623	774



**Fraction HPLC 2 + TFA MS2 774**



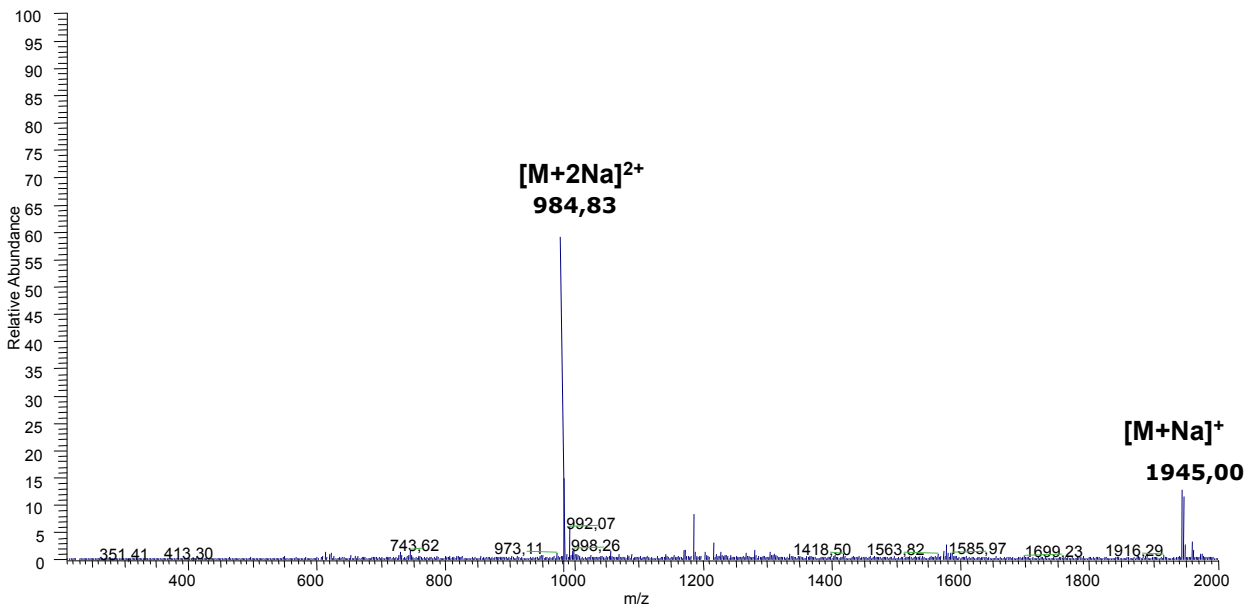
**Fig. 89 : Spectres SM<sup>n</sup> de la partie C-terminale du peptide 1 de la souche MMS 204.**

**Trichoderma section longibrachiatum MMS 204**

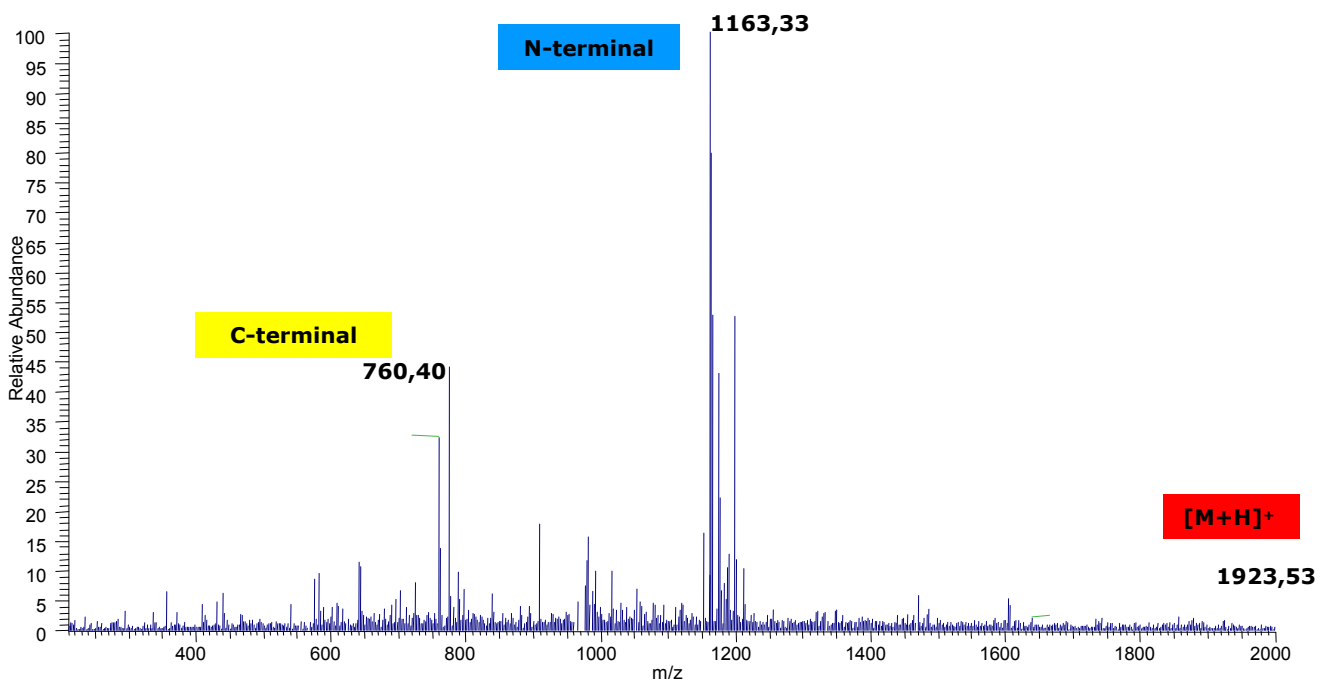
**Peptide 3**

Ac-U	A	U	A	U	A	Q	U	V	U	G	L	U	P	V	U	A	Q	Q	FOH
128	199	284	355	440	511	639	724	823	908	965	1078	1163	98	197	282	353	481	609	760

**(a) Fraction HPLC 3 sans Acide Full scan**



**(b) Fraction HPLC 3 + TFA Full scan**

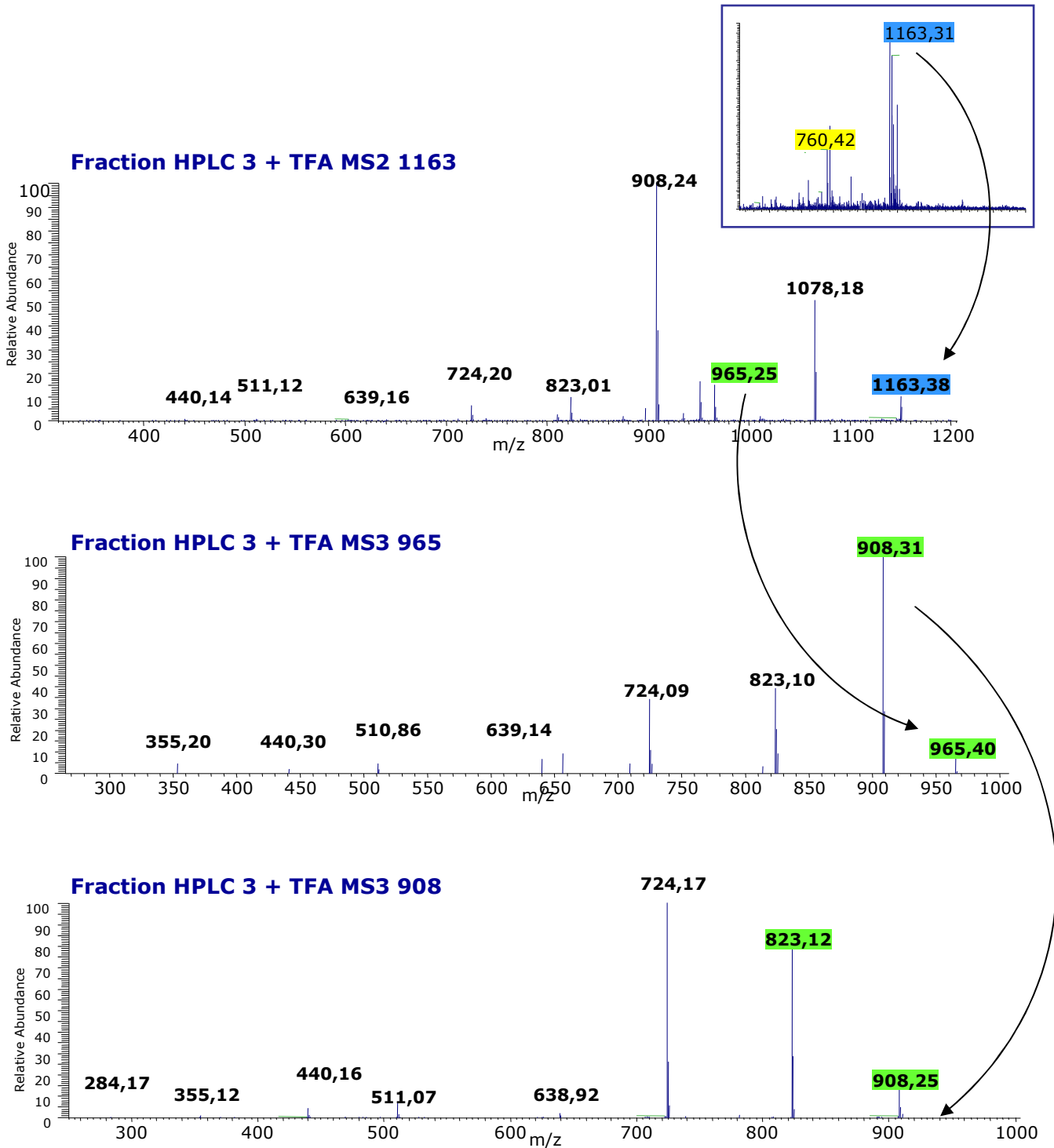


**Fig. 90 : Spectres SM en mode « full-scan » sans (a) et avec TFA (b) du peptide 3 de la souche MMS 204.**

**Trichoderma section longibrachiatum MMS 204**

**Peptide 3**

Ac-U	A	U	A	U	A	Q	U	V	U	G	L	U	P	V	U	A	Q	Q	FOH
128	199	284	355	440	511	639	724	823	908	965	1078	1163	98	197	282	353	481	609	760



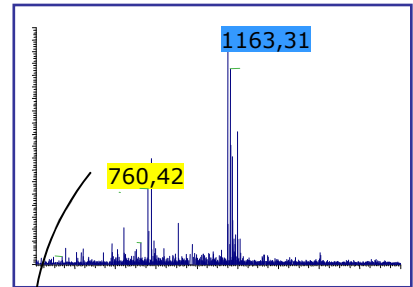
**Fig. 91 : Spectres SM<sup>n</sup> de la partie N-terminale du peptide 3 de la souche MMS 204.**



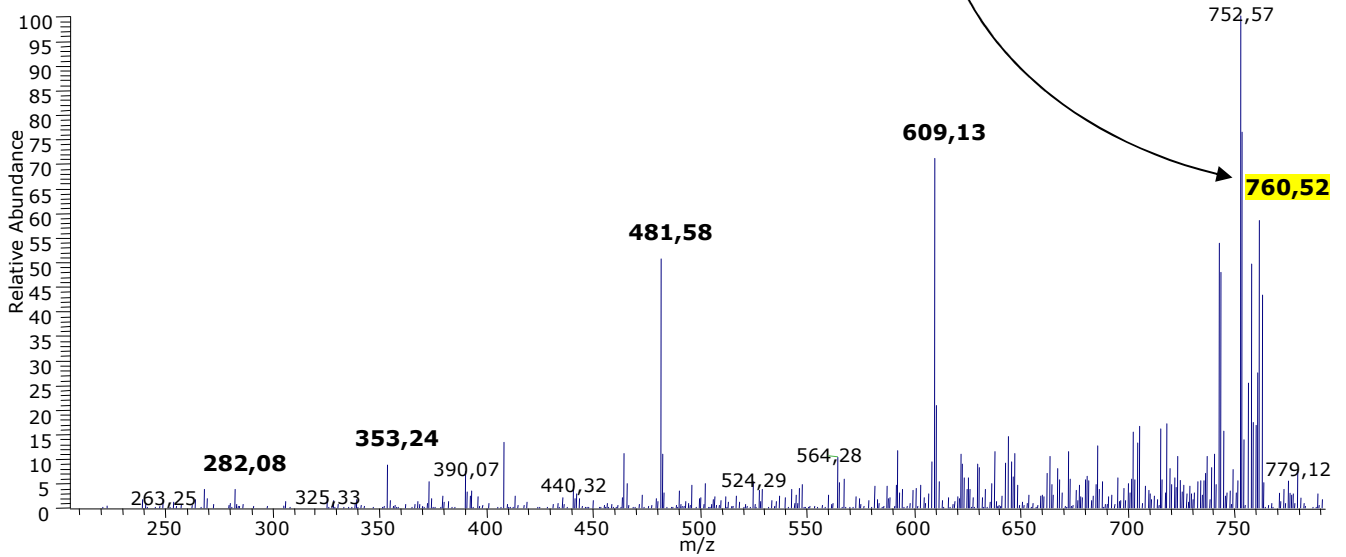
**Trichoderma section longibrachiatum MMS 204**

**Peptide 3**

Ac-U	A	U	A	U	A	Q	U	V	U	G	L	U	P	V	U	A	Q	Q	FOH
128	199	284	355	440	511	639	724	823	908	965	1078	1163	98	197	282	353	481	609	760



**Fraction HPLC 3 + TFA MS2 760**



**Fig. 92 : Spectres SM<sup>n</sup> de la partie C-terminale du peptide 3 de la souche MMS 204.**