Human apoE3 Restriction site

(http://tools.neb.com/NEBcutter2/index.php)

Cut pos.	MS	Enzyme	Recognition sequence
8		BslI	CCNN_NNN^NNGG
16		HpyAV	CCTTC(N)$_5$_N^
22		BbvI	GCAGC(N)$_8$^NNNN_
27		SetI	_ASST^
28		MboII	GAAGA(N)$_7$_N^
35		CviKI-1	RG|CY
35		TspDTI	ATGAA(N)$_9$_NN^
35		TseI	G^CWG_C
35	*	ApeKI	G^CWG_C
36	*	Fnu4HI	GC^N_GC
46		Tsp45I	^GTSAC_
46		MaeIII	^GTNAC_
53		SfaNI	GCATC(N)$_5$^NNNN_
54	#	BssKI	^CCNGG_
54	#	PspGI	^CCWGG_
54	#	StyD4I	^CCNGG_
56	#	ScrFI	CC^N_GG
56		BstNI	CC^W_GG
66	#	PspGI	^CCWGG_
66	#	StyD4I	^CCNGG_
66	#	BssKI	^CCNGG_
68		BstNI	CC^W_GG
68	#	ScrFI	CC^N_GG
68		BtsCI	GGATG_NN^
71		HaeIII	GG|CC
71		CviKI-1	RG|CY
71		PhoI	GG|CC
72		BsaJI	C^CNNG_G
72		StyI	C^CWWG_G
73	#	BslI	CCNN_NNN^NNGG
75		FokI	GGATG(N)$_9$^NNNN_
78		SetI	_ASST^
84	*	Cac8I	GCN|NGC
86	*	AciI	C^CG_C
86		BsmAI	GTCTCN^NNNN_
99		BbvI	GCAGC(N)$_8$^NNNN_
100		CviKI-1	RG|CY
101		MspI	C^CG_G
101	*	HpaII	C^CG_G
105	*	NlaIV	GGN|NCC
106		CviKI-1	RG|CY
107	*	AvaI	C^YCGR_G
107		BsoBI	C^YCGR_G
108		Bsp1286I	G_DGCH^C
108		BanII	G_RGCY^C
112		CviKI-1	RG|CY
112		TseI	G^CWG_C
112		AluI	AG|CT
112	*	ApeKI	G^CWG_C
112		MwoI	GCNN_NNN^NNGC
113	*	Fnu4HI	GC^N_GC
114		SetI	_ASST^
115	*	HinP1I	G^CG_C
117	*	HhaI	G_CG^C
118		MwoI	GCNN_NNN^NNGC
119	*	Cac8I	GCN|NGC

138	*	AciI	C^CG_C
138	*	BsrBI	CCG|CTC
139	*	EaeI	Y^GGCC_R
139	*	Fnu4HI	GC^N_GC
140	*	TaqII	GACCGA(N)$_{9}$_NN^
141		HaeIII	GG|CC
141		CviKI-1	RG|CY
141	*	TauI	G_CSG^C
141		PhoI	GG|CC
143	*	Cac8I	GCN|NGC
144	*	MwoI	GCNN_NNN^NNGC
145	*	HinP1I	G^CG_C
146	*	AfeI	AGC|GCT
147	*	BseYI	C^CCAG_C
147	*	HhaI	G_CG^C
148	*	HaeII	R_GCGC^Y
148		BslI	CCNN_NNN^NNGG
149		EcoP15I	CAGCAG(N)$_{25}$^NN_
159		BsrI	ACTG_GN^
165		TspRI	_NNCASTGNN^
165		BsrI	ACTG_GN^
170		BmrI	ACTGGGNNNN_N^
178		TaqII	CACCCA(N)$_{9}$_NN^
183		SetI	_ASST^
184	*	HinP1I	G^CG_C
186	*	HhaI	G_CG^C
186	*	BseYI	C^CCAG_C
187		BslI	CCNN_NNN^NNGG
189		BspMI	ACCTGCNNNN^NNNN_
189	*	BfuAI	ACCTGCNNNN^NNNN_
190		MwoI	GCNN_NNN^NNGC
193		HpyCH4V	TG|CA
196		BspCNI	CTCAG(N)$_{7}$_NN^
199		BspMI	ACCTGCNNNN^NNNN_
199		AlwNI	CAG_NNN^CTG
199		Tth111I	GACN^N_NGTC
199		BfuAI	ACCTGCNNNN^NNNN_
199		AarI	CACCTGCNNNN^NNNN_
199		PflFI	GACN^N_NGTC
201		HpyCH4III	AC_N^GT
204		DdeI	C^TNA_G
204		TspRI	_NNCASTGNN^
205		Hpy188I	TC_N^GA
210		BbvI	GCAGC(N)$_{8}$^NNNN_
211		MnlI	CCTC(N)$_{6}$_N^
212		BsgI	GTGCAG(N)$_{14}$_NN^
213		SetI	_ASST^
214		HpyCH4V	TG|CA
220		MwoI	GCNN_NNN^NNGC
223		CviKI-1	RG|CY
223		TseI	G^CWG_C
223		ApeKI	G^CWG_C
223		AluI	AG|CT
224		Fnu4HI	GC^N_GC
225		SetI	_ASST^
227		DdeI	C^TNA_G
227		BlpI	GC^TNA_GC
231		CviKI-1	RG|CY
231		AluI	AG|CT
232		HphI	GGTGA(N)$_{7}$_N^
233		BsgI	GTGCAG(N)$_{14}$_NN^
233		BseRI	GAGGAG(N)$_{8}$_NN^
233		SetI	_ASST^

234		BsaJI	C^CNNG_G
234	#	StyD4I	^CCNGG_
234	#	BssKI	^CCNGG_
234	#	PspGI	^CCWGG_
236		BstNI	CC^W_GG
236	#	ScrFI	CC^N_GG
238		Tsp45I	^GTSAC_
238		BstEII	G^GTNAC_C
238		MaeIII	^GTNAC_
240		BspCNI	CTCAG(N)$_7$_NN^
240	#	SetI	_ASST^
243	#	StyD4I	^CCNGG_
243		BspCNI	CTCAG(N)$_7$_NN^
243		BsaJI	C^CNNG_G
243	#	BssKI	^CCNGG_
243	#	PspGI	^CCWGG_
245		BstNI	CC^W_GG
245	#	ScrFI	CC^N_GG
246		MnlI	CCTC(N)$_6$_N^
250	#	AlwNI	CAG_NNN^CTG
251		DdeI	C^TNA_G
256		BccI	CCATCNNNN^N_
257	#	TaqII	CACCCA(N)$_9$_NN^
257	*	HinP1I	G^CG_C
259	*	HhaI	G_CG^C
260	*	HaeII	R_GCGC^Y
263	*	BsmAI	GTCTCN^NNNN_
263		BsaI	GGTCTCN^NNNN_
271		HpyAV	CCTTC(N)$_5$_N^
273		FatI	^CATG_
274		CviAII	C^AT_G
275		FaiI	YA|TR
277		NlaIII	_CATG^
280		HpyAV	CCTTC(N)$_5$_N^
286		AgsI	TT_S^AA
290		HaeIII	GG|CC
290		TspDTI	ATGAA(N)$_9$_NN^
290		CviKI-1	RG|CY
290		StuI	AGG|CCT
290		PhoI	GG|CC
301		Hpy188I	TC_N^GA
301		MnlI	CCTC(N)$_6$_N^
309		BsrI	ACTG_GN^
321		BsaJI	C^CNNG_G
321	*	StyD4I	^CCNGG_
321	*	BssKI	^CCNGG_
323		MspI	C^CG_G
323	*	HpaII	C^CG_G
323	*	NciI	CC^S_GG
323	*	ScrFI	CC^N_GG
325		MnlI	CCTC(N)$_6$_N^
326		BpmI	CTGGAG(N)$_{14}$_NN^
326		Eco57MI	CTGRAG(N)$_{14}$_NN^
328	*	BslI	CCNN_NNN^NNGG
329	*	AciI	C^CG_C
329	*	BsmBI	CGTCTCN^NNNN_
329		BsmAI	GTCTCN^NNNN_
333	*	FauI	CCCGCNNNN^NN_
340	*	BstUI	CG|CG
340	*	AciI	C^CG_C
342	*	Cac8I	GCN|NGC
344		EciI	GGCGGA(N)$_9$_NN^
346		BaeGI	G_KGCM^C

346		Bsp1286I	G_DGCH^C
346	*	MwoI	GCNN_NNN^NNGC
346	*	HgaI	GACGC(N)$_5$^(N)$_5$_
347		BseRI	GAGGAG(N)$_8$_NN^
348		BbvI	GCAGC(N)$_8$^NNNN_
349		CviKI-1	RG|CY
354		BsaJI	C^CNNG_G
354		StyI	C^CWWG_G
361		ApeKI	G^CWG_C
361		TseI	G^CWG_C
361		AluI	AG|CT
361		CviKI-1	RG|CY
362	*	BceAI	ACGGC(N)$_{12}$^NN_
362		SfcI	C^TRYA_G
362		Fnu4HI	GC^N_GC
363		SetI	_ASST^
364		HpyCH4V	TG|CA
366	*	Cac8I	GCN|NGC
366		PstI	C_TGCA^G
368	*	AciI	C^CG_C
369	*	Fnu4HI	GC^N_GC
370		MwoI	GCNN_NNN^NNGC
371	*	TauI	G_CSG^C
371	*	HinP1I	G^CG_C
373	*	HhaI	G_CG^C
374		MwoI	GCNN_NNN^NNGC
375	*	Cac8I	GCN|NGC
376	*	Sau96I	G^GNC_C
377		CviKI-1	RG|CY
377		HaeIII	GG|CC
377		PhoI	GG|CC
377	*	StyD4I	^CCNGG_
377	*	BssKI	^CCNGG_
379	*	ScrFI	CC^N_GG
379		MwoI	GCNN_NNN^NNGC
379	*	NciI	CC^S_GG
379		MspI	C^CG_G
379	*	HpaII	C^CG_G
382		BseYI	C^CCAG_C
382		CviKI-1	RG|CY
387	*	HinP1I	G^CG_C
389	*	HhaI	G_CG^C
389		BsaXI	_NNN^(N)$_9$AC(N)$_5$CTCC(N)$_7$_NNN^
389	*	BstUI	CG|CG
389		TstI	_(N)$_5$^(N)$_8$CAC(N)$_6$TCC(N)$_7$_(N)$_5$^
389	*	AciI	C^CG_C
391		MnlI	CCTC(N)$_6$_N^
393		FatI	^CATG_
394		CviAII	C^AT_G
395		FaiI	YA|TR
397		NlaIII	_CATG^
402	*	HpyCH4IV	A^CG_T
402		AflIII	A^CRYG_T
403	*	BmgBI	CAC|GTC
405	*	SetI	_ASST^
408	*	AciI	C^CG_C
409	*	NotI	GC^GGCC_GC
409	*	EagI	C^GGCC_G
409	*	Fnu4HI	GC^N_GC
409	*	EaeI	Y^GGCC_R
411	*	HaeIII	GG|CC
411	*	TauI	G_CSG^C
411		CviKI-1	RG|CY

411	*	PhoI	GG|CC
412	*	Fnu4HI	GC^N_GC
412	*	AciI	C^CG_C
412	*	BsiEI	CG_RY^CG
414	#	PspGI	^CCWGG_
414	#	StyD4I	^CCNGG_
414	*	TauI	G_CSG^C
414	#	BssKI	^CCNGG_
416		BstNI	CC^W_GG
416	#	ScrFI	CC^N_GG
421		HpyCH4V	TG|CA
424		CviQI	G^TA_C
425		RsaI	GT|AC
427	*	AciI	C^CG_C
427		MnlI	CCTC(N)$_6$_N^
427		BtgI	C^CRYG_G
427		BsaJI	C^CNNG_G
429	*	MspA1I	CMG|CKG
429	*	AciI	C^CG_C
429	*	BstUI	CG|CG
429		NmeAIII	GCCGAG(N)$_{19}$_NN^
430	*	SacII	CC_GC^GG
430	*	Fnu4HI	GC^N_GC
432	*	TauI	G_CSG^C
433	*	BslI	CCNN_NNN^NNGG
438		SetI	_ASST^
439		HpyCH4V	TG|CA
440		BsgI	GTGCAG(N)$_{14}$_NN^
441		Cac8I	GCN|NGC
443		CviKI-1	RG|CY
443		HaeIII	GG|CC
443		PhoI	GG|CC
444		FatI	^CATG_
445		MwoI	GCNN_NNN^NNGC
445		CviAII	C^AT_G
445		BstAPI	GCAN_NNN^NTGC
446		FaiI	YA|TR
448		NlaIII	_CATG^
451	*	EaeI	Y^GGCC_R
453		CviKI-1	RG|CY
453		HaeIII	GG|CC
453		PhoI	GG|CC
456		BbvI	GCAGC(N)$_8$^NNNN_
457		MnlI	CCTC(N)$_6$_N^
458		BsgI	GTGCAG(N)$_{14}$_NN^
461		Bsp1286I	G_DGCH^C
461		BsiHKAI	G_WGCW^C
462		BsaJI	C^CNNG_G
465	*	FauI	CCCGCNNNN^NN_
469		TseI	G^CWG_C
469		CviKI-1	RG|CY
469		AluI	AG|CT
469	*	ApeKI	G^CWG_C
470	*	Fnu4HI	GC^N_GC
471		SetI	_ASST^
472	*	AciI	C^CG_C
475		MwoI	GCNN_NNN^NNGC
478	*	HinP1I	G^CG_C
479		BseRI	GAGGAG(N)$_8$_NN^
480	*	HhaI	G_CG^C
489		BbvI	GCAGC(N)$_8$^NNNN_
491		MnlI	CCTC(N)$_6$_N^
495		SetI	_ASST^

496	*	HinP1I	G^CG_C
496		MnlI	CCTC(N)$_6$_N^
497	*	FspI	TGC|GCA
498	*	HhaI	G_CG^C
500	*	Cac8I	GCN|NGC
501		BspMI	ACCTGCNNNN^NNNN_
501	*	BfuAI	ACCTGCNNNN^NNNN_
501	*	AarI	CACCTGCNNNN^NNNN_
502		CviKI-1	RG|CY
502		TseI	G^CWG_C
502		AluI	AG|CT
502	*	ApeKI	G^CWG_C
502	*	MwoI	GCNN_NNN^NNGC
503	*	Fnu4HI	GC^N_GC
504		SetI	_ASST^
506		BseRI	GAGGAG(N)$_8$_NN^
508		MwoI	GCNN_NNN^NNGC
511		MwoI	GCNN_NNN^NNGC
511	*	AciI	C^CG_C
512	*	Fnu4HI	GC^N_GC
514		SfaNI	GCATC(N)$_5$^NNNN_
514		CviKI-1	RG|CY
514	*	TauI	G_CSG^C
515	*	NlaIV	GGN|NCC
520	*	AciI	C^CG_C
522	*	BstUI	CG|CG
527		MnlI	CCTC(N)$_6$_N^
536		SfcI	C^TRYA_G
537		SetI	_ASST^
537	*	BtgZI	GCGATG(N)$_{10}$^NNNN_
538		HpyCH4V	TG|CA
540		PstI	C_TGCA^G
543		BfuAI	ACCTGCNNNN^NNNN_
543		BspMI	ACCTGCNNNN^NNNN_
544	*	HinP1I	G^CG_C
546	#	BssKI	^CCNGG_
546	#	PspGI	^CCWGG_
546	#	StyD4I	^CCNGG_
546	*	HhaI	G_CG^C
547	*	HaeII	R_GCGC^Y
548	#	ScrFI	CC^N_GG
548		BstNI	CC^W_GG
556		CviQI	G^TA_C
556		Hpy166II	GTN|NAC
557		RsaI	GT|AC
558		TspRI	_NNCASTGNN^
558	#	StyD4I	^CCNGG_
558	#	PspGI	^CCWGG_
558		BtsI	GCAGTG_NN^
558	#	BssKI	^CCNGG_
560		BstNI	CC^W_GG
560	#	ScrFI	CC^N_GG
563		CviKI-1	RG|CY
563		PhoI	GG|CC
563		HaeIII	GG|CC
563	*	StyD4I	^CCNGG_
563	*	BssKI	^CCNGG_
564		MspI	C^CG_G
564	*	HpaII	C^CG_G
564		BsaJI	C^CNNG_G
565	*	NciI	CC^S_GG
565	#	BslI	CCNN_NNN^NNGG
565	*	ScrFI	CC^N_GG

567		Sau96I	G^GNC_C
567	*	PspOMI	G^GGCC_C
567		EcoO109I	RG^GNC_CY
568	*	NlaIV	GGN|NCC
568	*	Sau96I	G^GNC_C
568		MnlI	CCTC(N)$_6$_N^
569		PhoI	GG|CC
569		HaeIII	GG|CC
569	*	NlaIV	GGN|NCC
569		CviKI-1	RG|CY
571		BanII	G_RGCY^C
571		Bsp1286I	G_DGCH^C
571	*	Cac8I	GCN|NGC
571		BaeGI	G_KGCM^C
571	*	ApaI	G_GGCC^C
571	*	AciI	C^CG_C
573	*	BstUI	CG|CG
578	*	FauI	CCCGCNNNN^NN_
578	*	BanI	G^GYRC_C
578	*	KasI	G^GCGC_C
579	*	NarI	GG^CG_CC
579	*	HinP1I	G^CG_C
579	*	BsaHI	GR^CG_YC
580	*	SfoI	GGC|GCC
580	*	NlaIV	GGN|NCC
581	*	HhaI	G_CG^C
582	*	HaeII	R_GCGC^Y
585	*	MwoI	GCNN_NNN^NNGC
586	*	HinP1I	G^CG_C
587	*	FokI	GGATG(N)$_9$^NNNN_
588	*	HhaI	G_CG^C
588	*	BstUI	CG|CG
588	*	AciI	C^CG_C
589	*	Fnu4HI	GC^N_GC
591	*	TauI	G_CSG^C
591		PhoI	GG|CC
591		HaeIII	GG|CC
591		CviKI-1	RG|CY
593	*	BbvCI	CC^TCA_GC
593		DdeI	C^TNA_G
593		Bpu10I	CC^TNA_GC
594	*	MwoI	GCNN_NNN^NNGC
597	*	HinP1I	G^CG_C
599	*	HhaI	G_CG^C
600		BtsCI	GGATG_NN^
600	*	HaeII	R_GCGC^Y
602		MnlI	CCTC(N)$_6$_N^
603	*	MwoI	GCNN_NNN^NNGC
604	*	AciI	C^CG_C
606	*	BstUI	CG|CG
606		BspCNI	CTCAG(N)$_7$_NN^
607		NmeAIII	GCCGAG(N)$_{19}$_NN^
608		BccI	CCATCNNNN^N_
608	*	Cac8I	GCN|NGC
610	*	HinP1I	G^CG_C
612	*	HhaI	G_CG^C
612	#	StyD4I	^CCNGG_
612	#	BssKI	^CCNGG_
612	#	PspGI	^CCWGG_
613		BsaJI	C^CNNG_G
613	*	HaeII	R_GCGC^Y
614		BstNI	CC^W_GG
614	#	ScrFI	CC^N_GG

616		MwoI	GCNN_NNN^NNGC
617		Sau96I	G^GNC_C
617		Eco0109I	RG^GNC_CY
617		PspOMI	G^GGCC_C
618		Eco0109I	RG^GNC_CY
618		Sau96I	G^GNC_C
618	#	NlaIV	GGN|NCC
619		NlaIV	GGN|NCC
619		CviKI-1	RG|CY
619		PhoI	GG|CC
619		HaeIII	GG|CC
620	#	NlaIV	GGN|NCC
621		BanII	G_RGCY^C
621	#	BssKI	^CCNGG_
621		BaeGI	G_KGCM^C
621		Bsp1286I	G_DGCH^C
621	#	StyD4I	^CCNGG_
621		ApaI	G_GGCC^C
621		BsaJI	C^CNNG_G
621	#	PspGI	^CCWGG_
623	#	ScrFI	CC^N_GG
623		BstNI	CC^W_GG
634	*	Sau96I	G^GNC_C
636		CviKI-1	RG|CY
636	*	FauI	CCCGCNNNN^NN_
636		HaeIII	GG|CC
636		PhoI	GG|CC
637	*	Fnu4HI	GC^N_GC
637	*	AciI	C^CG_C
639	*	BstUI	CG|CG
639	*	TauI	G_CSG^C
641	*	Cac8I	GCN|NGC
643	*	BslI	CCNN_NNN^NNGG
643	*	AciI	C^CG_C
645	*	Cac8I	GCN|NGC
645	*	Sau96I	G^GNC_C
647		PhoI	GG|CC
647		CviKI-1	RG|CY
647		HaeIII	GG|CC
648	*	AciI	C^CG_C
648	*	Fnu4HI	GC^N_GC
650	*	TauI	G_CSG^C
655		HpyCH4III	AC_N^GT
658		TspRI	_NNCASTGNN^
660		CviKI-1	RG|CY
661		NlaIV	GGN|NCC
662		Bsp1286I	G_DGCH^C
662		BanII	G_RGCY^C
663	#	StyD4I	^CCNGG_
663	#	BssKI	^CCNGG_
663		BsaJI	C^CNNG_G
663	#	PspGI	^CCWGG_
665	#	ScrFI	CC^N_GG
665		BstNI	CC^W_GG
666	*#	EaeI	Y^GGCC_R
668		HaeIII	GG|CC
668	*	NgoMIV	G^CCGG_C
668		PhoI	GG|CC
668		CviKI-1	RG|CY
668	*	BsrFI	R^CCGG_Y
669	*	HpaII	C^CG_G
669		MspI	C^CG_G
670	*	NaeI	GCC|GGC

670	*	EaeI	Y^GGCC_R
670	*	Cac8I	GCN|NGC
672	*	FseI	GG_CCGG^CC
672		CviKI-1	RG|CY
672		HaeIII	GG|CC
672		PhoI	GG|CC
674		Cac8I	GCN|NGC
676		CviKI-1	RG|CY
677	*	Fnu4HI	GC^N_GC
677	*	AciI	C^CG_C
679	*	TauI	G_CSG^C
680		SfcI	C^TRYA_G
681	*	FauI	CCCGCNNNN^NN_
685		MwoI	GCNN_NNN^NNGC
688	*	AciI	C^CG_C
688	*	BsrBI	CCG|CTC
690	*	Sau96I	G^GNC_C
690	*#	PspOMI	G^GGCC_C
690	*	Cac8I	GCN|NGC
691	#	Sau96I	G^GNC_C
692	*#	NlaIV	GGN|NCC
692		HaeIII	GG|CC
692		PhoI	GG|CC
692		CviKI-1	RG|CY
693		BsaJI	C^CNNG_G
693	#	PspGI	^CCWGG_
693	#	StyD4I	^CCNGG_
693	#	BssKI	^CCNGG_
694		Bsp1286I	G_DGCH^C
694		BaeGI	G_KGCM^C
694	*#	ApaI	G_GGCC^C
694		BanII	G_RGCY^C
695		BstNI	CC^W_GG
695	#	ScrFI	CC^N_GG
698	#	StyD4I	^CCNGG_
698	#	PspGI	^CCWGG_
698	#	BssKI	^CCNGG_
698		CviKI-1	RG|CY
698	#	HaeIII	GG|CC
698	#	PhoI	GG|CC
698	#	StuI	AGG|CCT
699		BbvI	GCAGC(N)$_8$^NNNN_
699	#	BslI	CCNN_NNN^NNGG
699		BsaJI	C^CNNG_G
700		BstNI	CC^W_GG
700	#	BslI	CCNN_NNN^NNGG
700	#	ScrFI	CC^N_GG
707	*	Cac8I	GCN|NGC
709	*	AciI	C^CG_C
709	*	BsrBI	CCG|CTC
710	*	Fnu4HI	GC^N_GC
712		CviKI-1	RG|CY
712	*	ApeKI	G^CWG_C
712	*	TauI	G_CSG^C
712		TseI	G^CWG_C
713	*	Fnu4HI	GC^N_GC
715	*	HinP1I	G^CG_C
715	*	BssHII	G^CGCG_C
717	*	BstUI	CG|CG
717	*	HhaI	G_CG^C
717	*	HinP1I	G^CG_C
717	*	MauBI	CG^CGCG_CG
717	*	Cac8I	GCN|NGC

717	*	BssHII	G^CGCG_C
718		BccI	CCATCNNNN^N_
718	*	MwoI	GCNN_NNN^NNGC
719	*	BstUI	CG|CG
719	*	HinP1I	G^CG_C
719	*	Cac8I	GCN|NGC
719	*	HhaI	G_CG^C
721		MnlI	CCTC(N)$_6$_N^
721	*	AciI	C^CG_C
721	*	HhaI	G_CG^C
721	*	BstUI	CG|CG
727		BccI	CCATCNNNN^N_
729		BtsCI	GGATG_NN^
736	*	FokI	GGATG(N)$_9$^NNNN_
738		TseI	G^CWG_C
738		ApeKI	G^CWG_C
739		Fnu4HI	GC^N_GC
741		CviKI-1	RG|CY
742	*	HpaII	C^CG_G
742		MspI	C^CG_G
743		BseRI	GAGGAG(N)$_8$_NN^
744	*	Sau96I	G^GNC_C
744	*	AvaII	G^GWC_C
746	*	NlaIV	GGN|NCC
747	*	MwoI	GCNN_NNN^NNGC
748	*	AciI	C^CG_C
750	*	BstUI	CG|CG
750		BbvI	GCAGC(N)$_8$^NNNN_
754	*	AciI	C^CG_C
754	*	BsiEI	CG_RY^CG
755	*	FauI	CCCGCNNNN^NN_
756	#	StyD4I	^CCNGG_
756	#	BssKI	^CCNGG_
756	#	PspGI	^CCWGG_
757		MnlI	CCTC(N)$_6$_N^
758		BstNI	CC^W_GG
758	#	ScrFI	CC^N_GG
761		EcoNI	CCTNN^N_NNAGG
763		HpyAV	CCTTC(N)$_5$_N^
763	#	BslI	CCNN_NNN^NNGG
766		BspMI	ACCTGCNNNN^NNNN_
766		BfuAI	ACCTGCNNNN^NNNN_
766		AarI	CACCTGCNNNN^NNNN_
768		SetI	_ASST^
778		MnlI	CCTC(N)$_6$_N^
778		HphI	GGTGA(N)$_7$_N^
780		SetI	_ASST^
782	*	AciI	C^CG_C
789		SetI	_ASST^
790	*	BssHII	G^CGCG_C
790	*	HinP1I	G^CG_C
792	*	BstUI	CG|CG
792	*	Cac8I	GCN|NGC
792	*	HinP1I	G^CG_C
792	*	HhaI	G_CG^C
794	*	HhaI	G_CG^C
796		MnlI	CCTC(N)$_6$_N^
796		MwoI	GCNN_NNN^NNGC
797		EciI	GGCGGA(N)$_9$_NN^
799		CviKI-1	RG|CY
799		AluI	AG|CT
801		SetI	_ASST^
805		MwoI	GCNN_NNN^NNGC

810		Cac8I	GCN|NGC
811		Sau96I	G^GNC_C
812		HaeIII	GG|CC
812		CviKI-1	RG|CY
812		PhoI	GG|CC
813		BseYI	C^CCAG_C
814		MwoI	GCNN_NNN^NNGC
818		BseRI	GAGGAG(N)$_8$_NN^
821		BpmI	CTGGAG(N)$_{14}$_NN^
821		Eco57MI	CTGRAG(N)$_{14}$_NN^
827		SfcI	C^TRYA_G
827	*	Cac8I	GCN|NGC
829		MnlI	CCTC(N)$_6$_N^
829		HpyCH4V	TG|CA
831		Cac8I	GCN|NGC
831		SbfI	CC_TGCA^GG
831		PstI	C_TGCA^G
833		HaeIII	GG|CC
833		PhoI	GG|CC
833		CviKI-1	RG|CY
834		BsaJI	C^CNNG_G
839		BpuEI	CTTGAG(N)$_{14}$_NN^
839		CviKI-1	RG|CY
839		HaeIII	GG|CC
839		PhoI	GG|CC
839		StuI	AGG|CCT
843	#	PspGI	^CCWGG_
843	#	BssKI	^CCNGG_
843	#	StyD4I	^CCNGG_
845		MwoI	GCNN_NNN^NNGC
845		BstNI	CC^W_GG
845	#	SfiI	GGCCN_NNN^NGGCC
845		EcoP15I	CAGCAG(N)$_{25}$^NN_
845		BglI	GCCN_NNN^NGGC
845	#	ScrFI	CC^N_GG
847	*#	Sau96I	G^GNC_C
848		HaeIII	GG|CC
848		PhoI	GG|CC
848		CviKI-1	RG|CY
850		HpyAV	CCTTC(N)$_5$_N^
850	*	AciI	C^CG_C
850	*	Cac8I	GCN|NGC
854		SmlI	C^TYRA_G
856		Hpy188III	TC^NN_GA
857	*	FauI	CCCGCNNNN^NN_
858		MwoI	GCNN_NNN^NNGC
859		NmeAIII	GCCGAG(N)$_{19}$_NN^
861		AluI	AG|CT
861		CviKI-1	RG|CY
863		SetI	_ASST^
863		MnlI	CCTC(N)$_6$_N^
867		TaqI	T^CG_A
871		CviKI-1	RG|CY
873	#	StyD4I	^CCNGG_
873		BanII	G_RGCY^C
873		BsaJI	C^CNNG_G
873	#	BssKI	^CCNGG_
873	#	PspGI	^CCWGG_
873		Bsp1286I	G_DGCH^C
875		BstNI	CC^W_GG
875	#	ScrFI	CC^N_GG
885		FatI	^CATG_
886		CviAII	C^AT_G

887		FaiI	YA|TR
888		BbsI	GAAGACNN^NNNN_
889		TseI	G^CWG_C
889		HpyCH4V	TG|CA
889		NlaIII	_CATG^
889		NspI	R_CATG^Y
889	*	ApeKI	G^CWG_C
890	*	Fnu4HI	GC^N_GC
892	*	HinP1I	G^CG_C
893		MboII	GAAGA(N)$_7$_N^
894	*	HhaI	G_CG^C
895		BsrI	ACTG_GN^
895	*	HaeII	R_GCGC^Y
900	*	Sau96I	G^GNC_C
901		BbvI	GCAGC(N)$_8$^NNNN_
902	*	StyD4I	^CCNGG_
902		HaeIII	GG|CC
902		TspRI	_NNCASTGNN^
902		CviKI-1	RG|CY
902		PhoI	GG|CC
902	*	BssKI	^CCNGG_
903		MspI	C^CG_G
903	*	HpaII	C^CG_G
904	*	NciI	CC^S_GG
904	*	ScrFI	CC^N_GG
907		CviKI-1	RG|CY
910		HpyAV	CCTTC(N)$_5$_N^
913		BbvI	GCAGC(N)$_8$^NNNN_
914	*	BceAI	ACGGC(N)$_{12}$^NN_
921		SetI	_ASST^
922		HpyCH4V	TG|CA
924		Cac8I	GCN|NGC
926		TseI	G^CWG_C
926		CviKI-1	RG|CY
926		ApeKI	G^CWG_C
927		Fnu4HI	GC^N_GC
930		BtgI	C^CRYG_G
930		BsaJI	C^CNNG_G
935		BanI	G^GYRC_C
937		NlaIV	GGN|NCC
938		Bsp1286I	G_DGCH^C
938		BaeGI	G_KGCM^C
941		BsgI	GTGCAG(N)$_{14}$_NN^
942	*	HinP1I	G^CG_C
944	*	HhaI	G_CG^C
945	*	Fnu4HI	GC^N_GC
945	*	HaeII	R_GCGC^Y
945	*	AciI	C^CG_C
947	*	TauI	G_CSG^C
956	*	BseYI	C^CCAG_C
957		Bsp1286I	G_DGCH^C
957		BaeGI	G_KGCM^C
974		TspRI	_NNCASTGNN^
982		CviKI-1	RG|CY
984		SfcI	C^TRYA_G
984		Cac8I	GCN|NGC
986		TseI	G^CWG_C
986		HpyCH4V	TG|CA
986		ApeKI	G^CWG_C
987		Fnu4HI	GC^N_GC
988		PstI	C_TGCA^G
989		CviKI-1	RG|CY
990		FatI	^CATG_

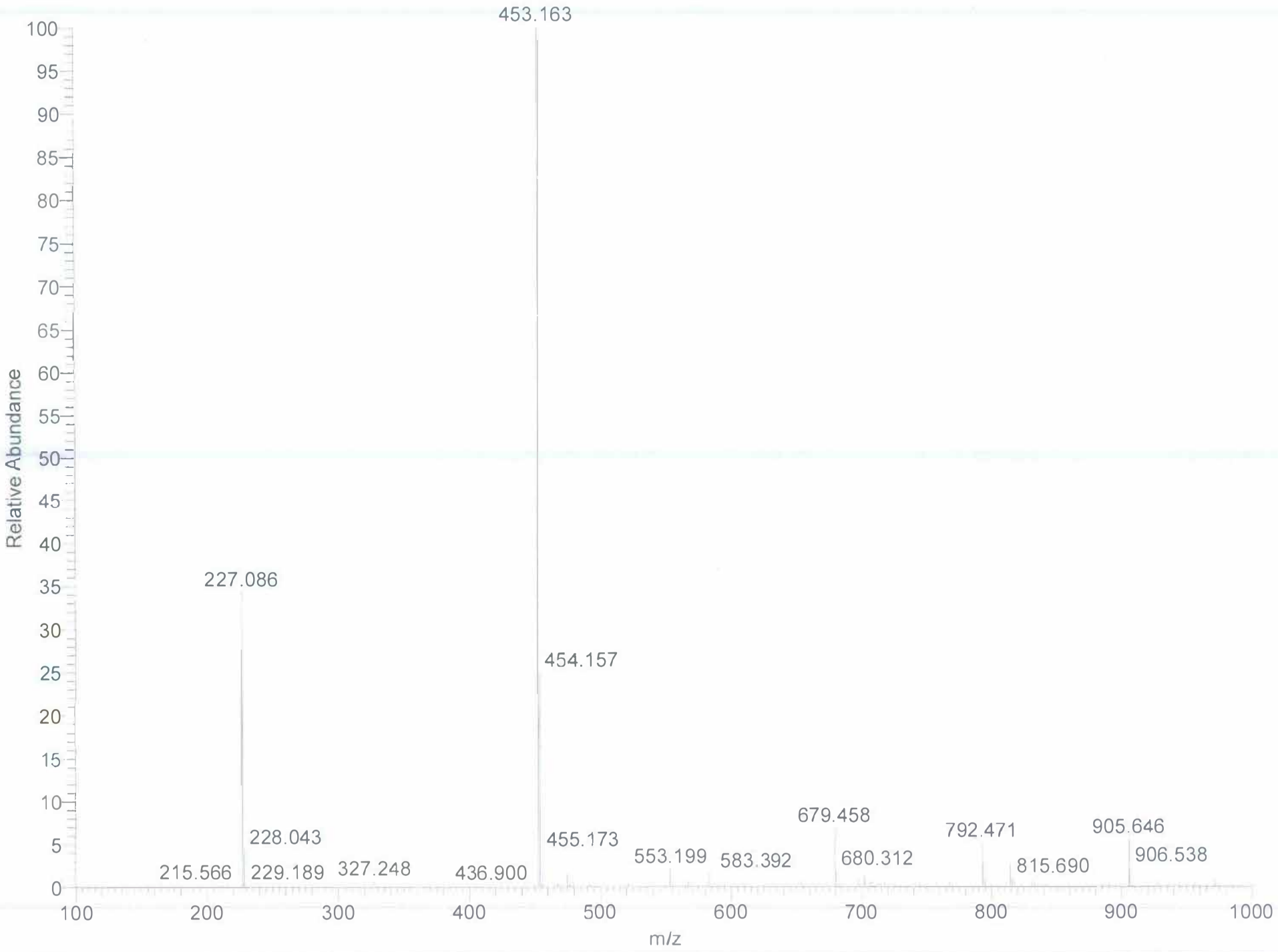
991		CviAII	C^AT_G
992		FaiI	YA|TR
994		NlaIII	_CATG^
998		BbvI	GCAGC(N)$_8$^NNNN_
1011	*	DraIII	CAC_NNN^GTG
1025		MnlI	CCTC(N)$_6$_N^
1025	*	AciI	C^CG_C
1027	*	BstUI	CG|CG
1027	*	HinP1I	G^CG_C
1029	*	HhaI	G_CG^C
1029		TseI	G^CWG_C
1029	*	ApeKI	G^CWG_C
1030	*	Fnu4HI	GC^N_GC
1032	*	FauI	CCCGCNNNN^NN_
1032		CviKI-1	RG|CY
1032		MnlI	CCTC(N)$_6$_N^
1033	*	MwoI	GCNN_NNN^NNGC
1034		Cac8I	GCN|NGC
1034		BsaXI	_NNN^(N)$_9$AC(N)$_5$CTCC(N)$_7$_NNN^
1034		SfcI	C^TRYA_G
1034		Hin4I	_(N)$_5$^(N)$_8$GAY(N)$_5$VTC(N)$_8$_(N)$_5$^
1036		BsmFI	GGGAC(N)$_{10}$^NNNN_
1036		HpyCH4V	TG|CA
1036	*	ApeKI	G^CWG_C
1036		TseI	G^CWG_C
1037		BsmAI	GTCTCN^NNNN_
1037	*	Fnu4HI	GC^N_GC
1037		BsaI	GGTCTCN^NNNN_
1038		PstI	C_TGCA^G
1039	*	AciI	C^CG_C
1039	*	MspA1I	CMG|CKG
1039		BslI	CCNN_NNN^NNGG
1041		BbvI	GCAGC(N)$_8$^NNNN_
1048	*	BceAI	ACGGC(N)$_{12}$^NN_
1048		BbvI	GCAGC(N)$_8$^NNNN_
1048		PflFI	GACN^N_NGTC
1048		Tth111I	GACN^N_NGTC
1055	*	AciI	C^CG_C
1059		BseYI	C^CCAG_C
1062	*	FauI	CCCGCNNNN^NN_
1063		CviKI-1	RG|CY
1070	#	StyD4I	^CCNGG_
1070	#	BssKI	^CCNGG_
1070	#	PspGI	^CCWGG_
1071		BsaJI	C^CNNG_G
1072	#	ScrFI	CC^N_GG
1072		BstNI	CC^W_GG
1078		MnlI	CCTC(N)$_6$_N^
1079		Hpy166II	GTN|NAC
1079		Sau96I	G^GNC_C
1079		AvaII	G^GWC_C
1081		NlaIV	GGN|NCC
1084		BfaI	C^TA_G
1089		MseI	T^TA_A
1090		EcoP15I	CAGCAG(N)$_{25}$^NN_
1092		HphI	GGTGA(N)$_7$_N^
1097		HinfI	G^ANT_C
1097		TfiI	G^AWT_C
1122		Cac8I	GCN|NGC
1123		SfaNI	GCATC(N)$_5$^NNNN_
1124		PhoI	GG|CC
1124		HaeIII	GG|CC
1124		CviKI-1	RG|CY

1135	MnlI	CCTC(N)$_6$_N^
1144	DdeI	C^TNA_G
1148	CviKI-1	RG|CY
1150	BseYI	C^CCAG_C
1151	MnlI	CCTC(N)$_6$_N^
1154	CviKI-1	RG|CY
1156	DdeI	C^TNA_G
1165	MnlI	CCTC(N)$_6$_N^
1169	BspCNI	CTCAG(N)$_7$_NN^
1178	FaiI	YA|TR
1180	PflMI	CCAN_NNN^NTGG
1180	BslI	CCNN_NNN^NNGG
1183	AvaII	G^GWC_C
1183	Sau96I	G^GNC_C
1185	BsrI	ACTG_GN^
1187	SfcI	C^TRYA_G
1188	SetI	_ASST^
1189	HpyCH4V	TG|CA
1191	Cac8I	GCN|NGC
1191	SbfI	CC_TGCA^GG
1191	PstI	C_TGCA^G
1193	FatI	^CATG_
1194	BfuAI	ACCTGCNNNN^NNNN_
1194	BspMI	ACCTGCNNNN^NNNN_
1194	CviAII	C^AT_G
1195	Cac8I	GCN|NGC
1195	FaiI	YA|TR
1197	HpyCH4V	TG|CA
1197	NspI	R_CATG^Y
1197	NlaIII	_CATG^
1197	SphI	G_CATG^C
1197	ApeKI	G^CWG_C
1197	TseI	G^CWG_C
1198	Fnu4HI	GC^N_GC
1200	CviKI-1	RG|CY
1202	BseYI	C^CCAG_C
1203	MwoI	GCNN_NNN^NNGC
1206	CviKI-1	RG|CY

S#: 14831 FULL: Q1MS CT: 1.03 #A: 10

Carnosine

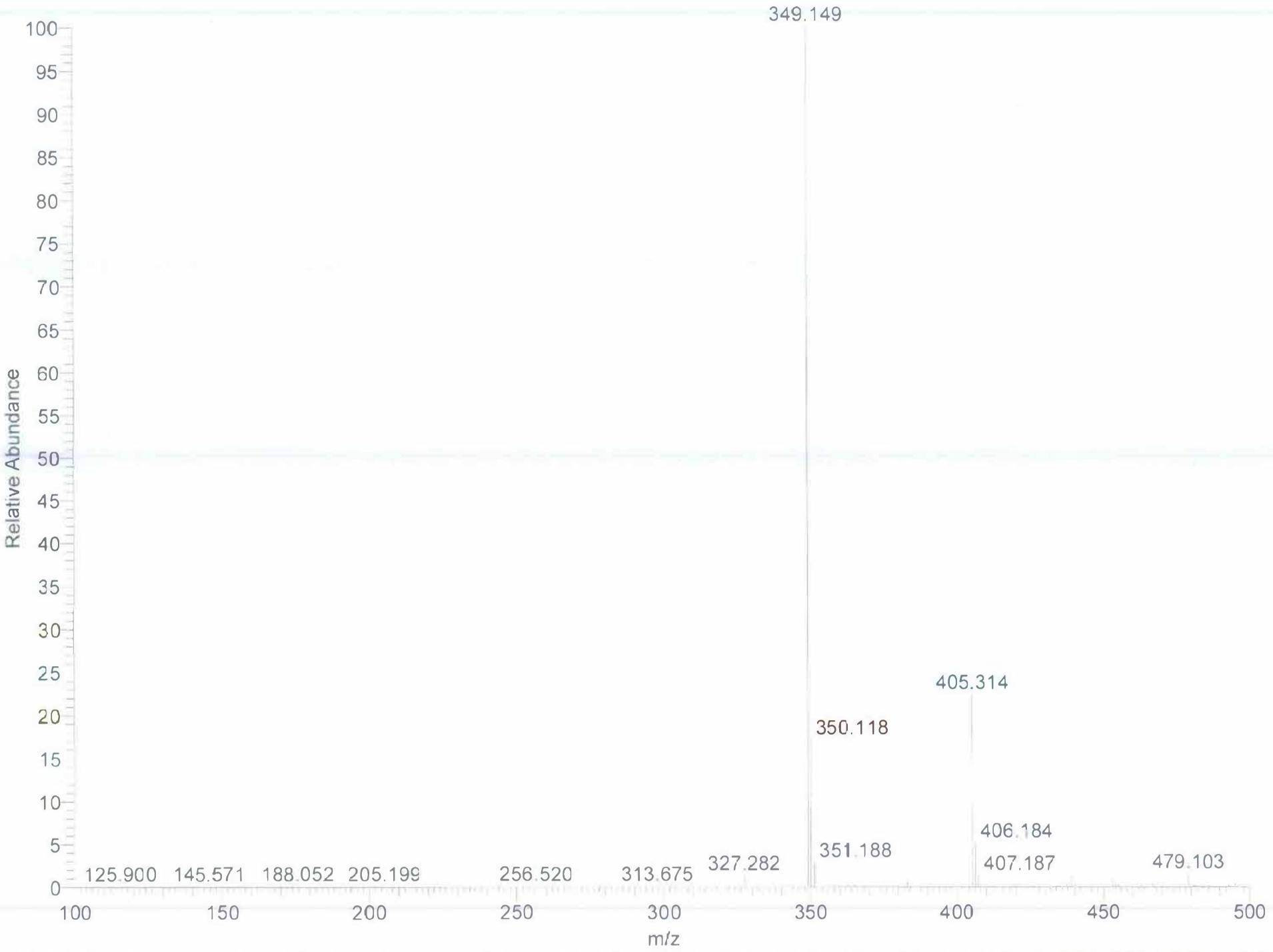
1.95e5



S#: 14130 FULL: Q1MS CT: 1.02 #A: 10

Boc-Carnosine

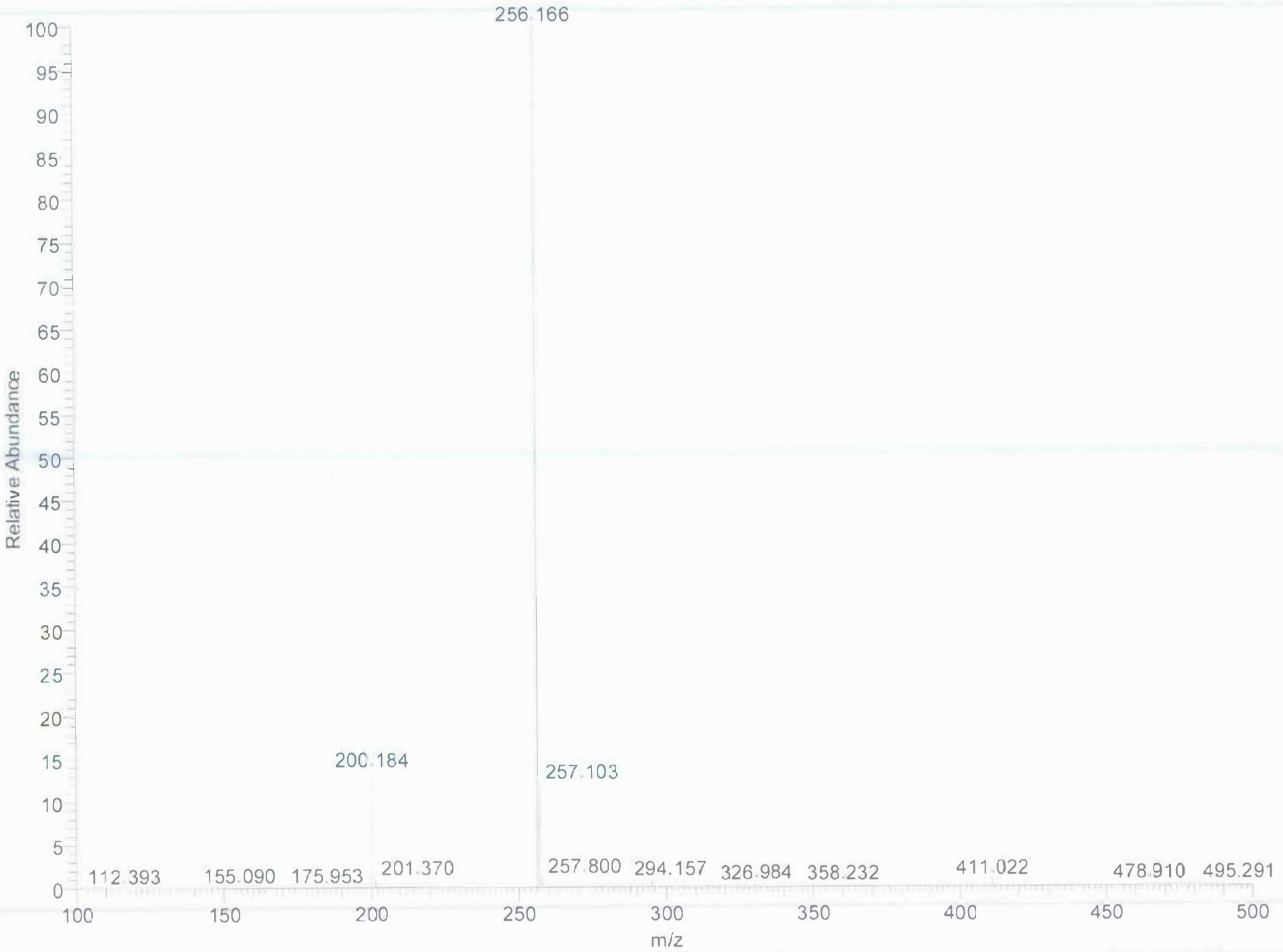
2.13e4



S# 13661 FULL Q1MS CT 1.02 #A 10

Boc-Histidine

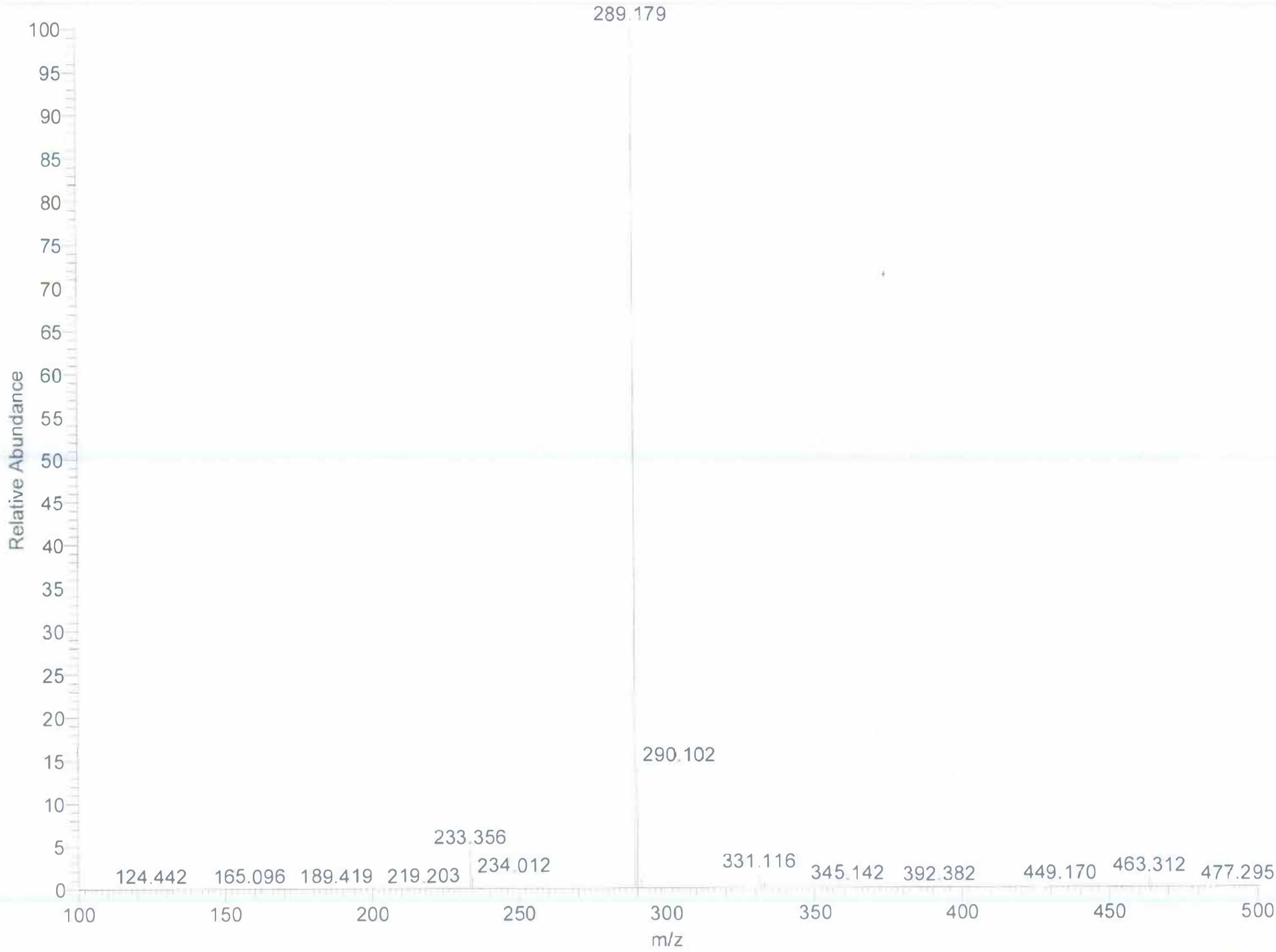
1.95e4



S#: 15628 FULL: Q1MS CT: 1.02 #A: 10

Boc·Arginine·OH

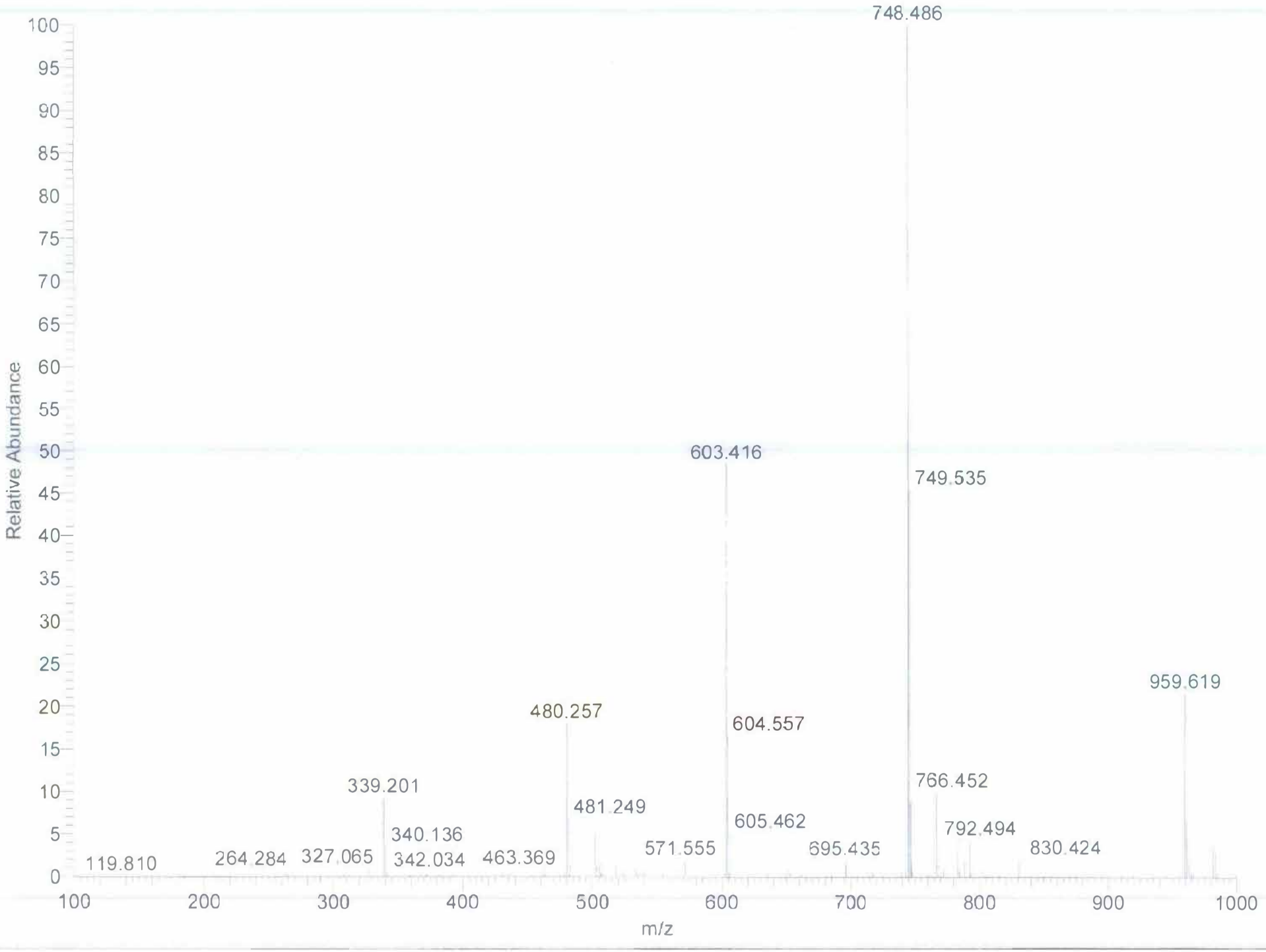
3.47e4

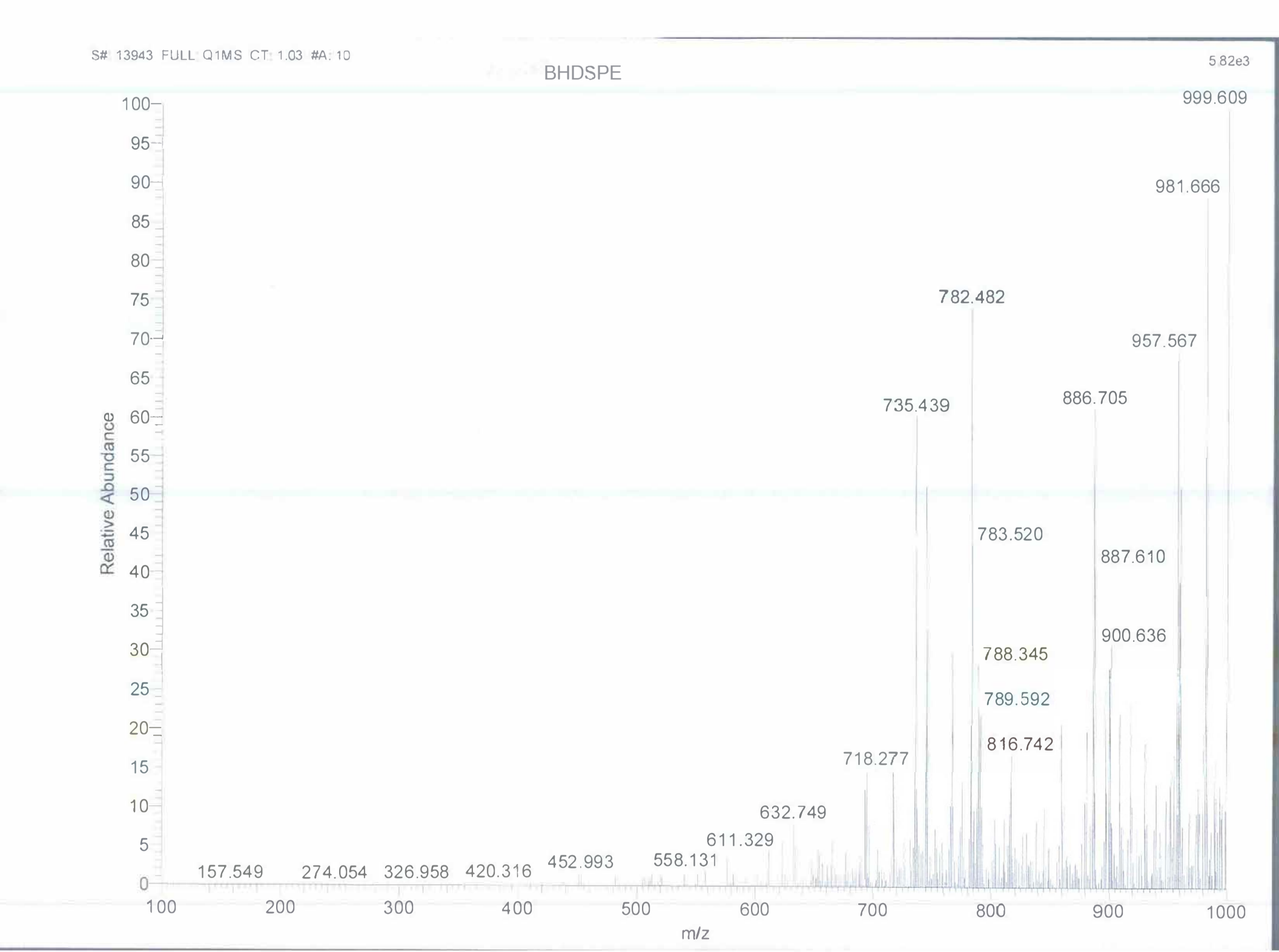


S#: 12470 FULL: Q1MS CT: 1.03

DSPE

8.77e5




S# 13943 FULL Q1MS CT 1.03 #A 10
BHDSPE
5.82e3
999.609
981.666
782.482
957.567
735.439
886.705
783.520
887.610
900.636
788.345
789.592
816.742
718.277
632.749
611.329
558.131
452.993
420.316
326.958
274.054
157.549
Relative Abundance
m/z
100
95
90
85
80
75
70
65
60
55
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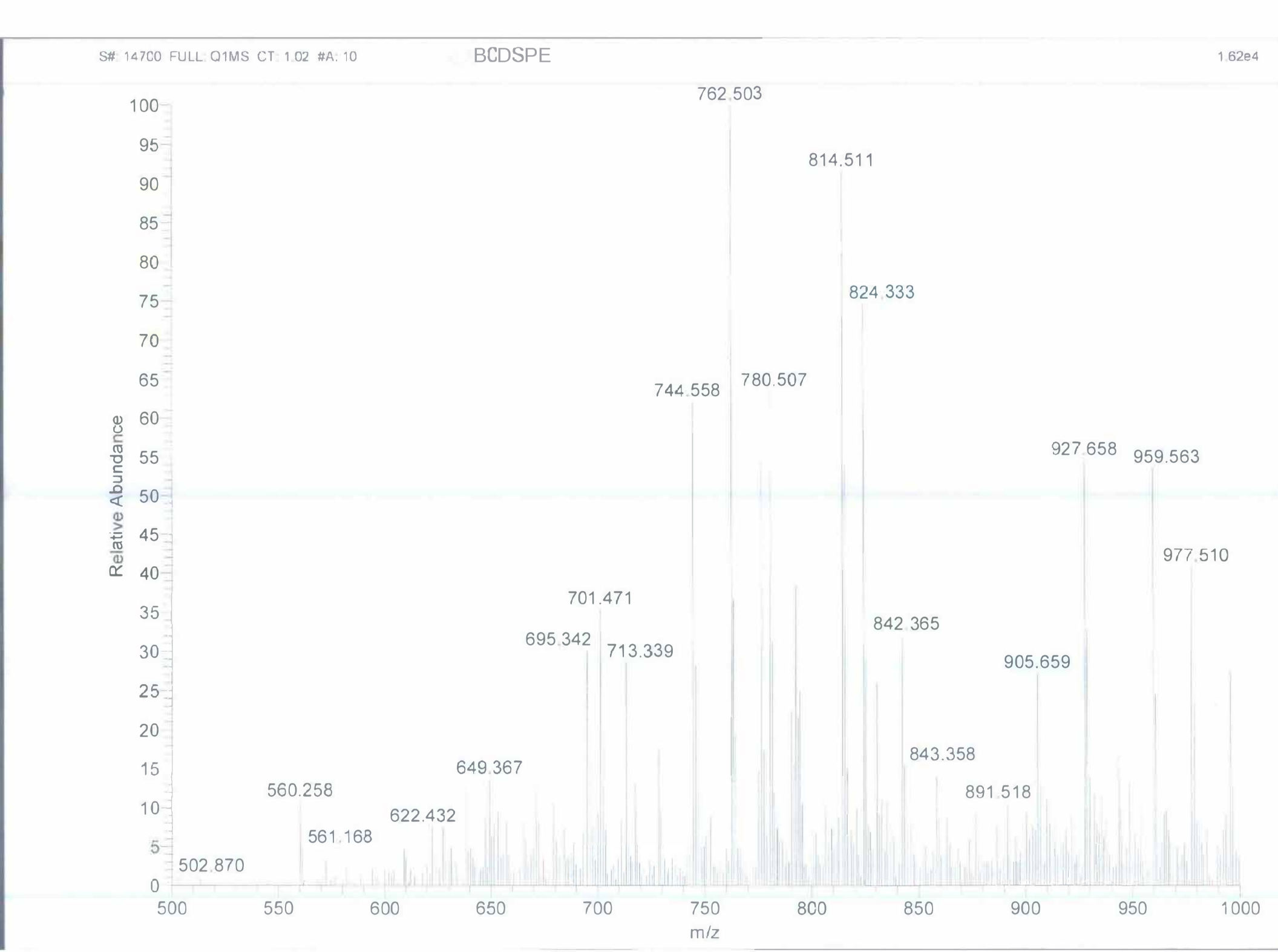
1000


S#: 14700 FULL Q1MS CT: 1.02 #A: 10
BCDSPE
1.62e4
762.503
814.511
824.333
744.558
780.507
927.658
959.563
977.510
701.471
695.342
713.339
842.365
905.659
843.358
891.518
649.367
560.258
622.432
561.168
502.870
Relative Abundance
m/z
100
95
90
85
80
75
70
65
60
55
50
45
40
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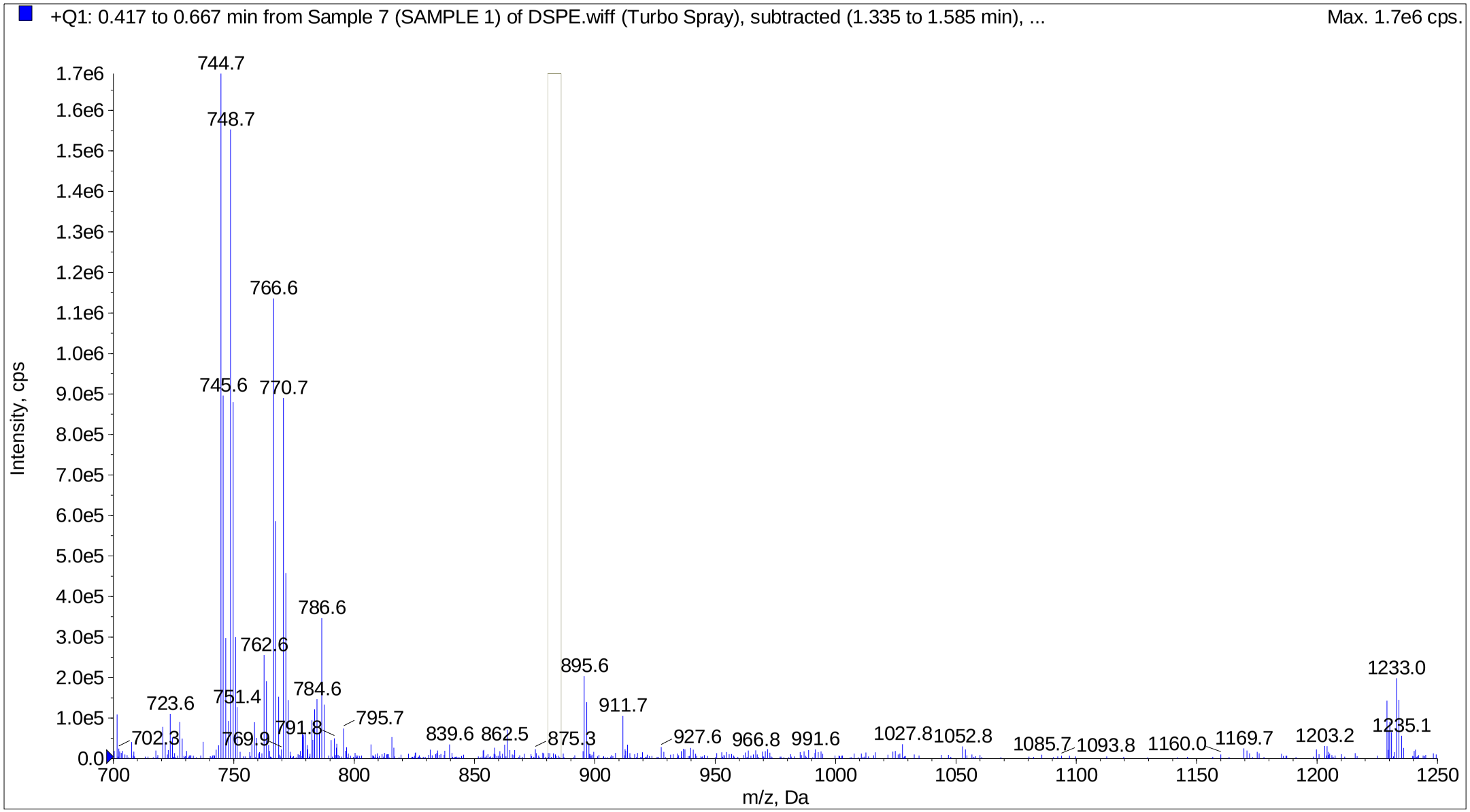
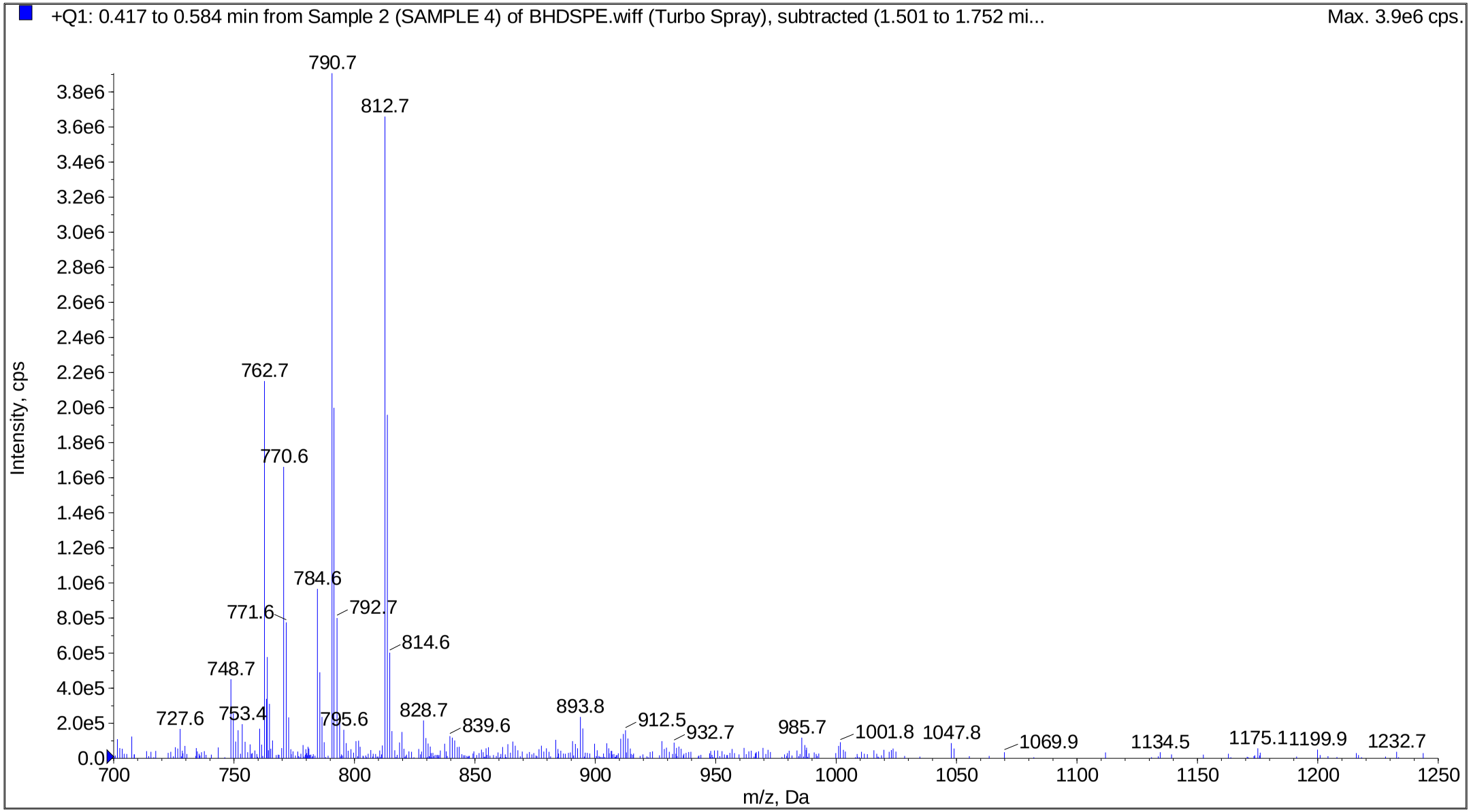


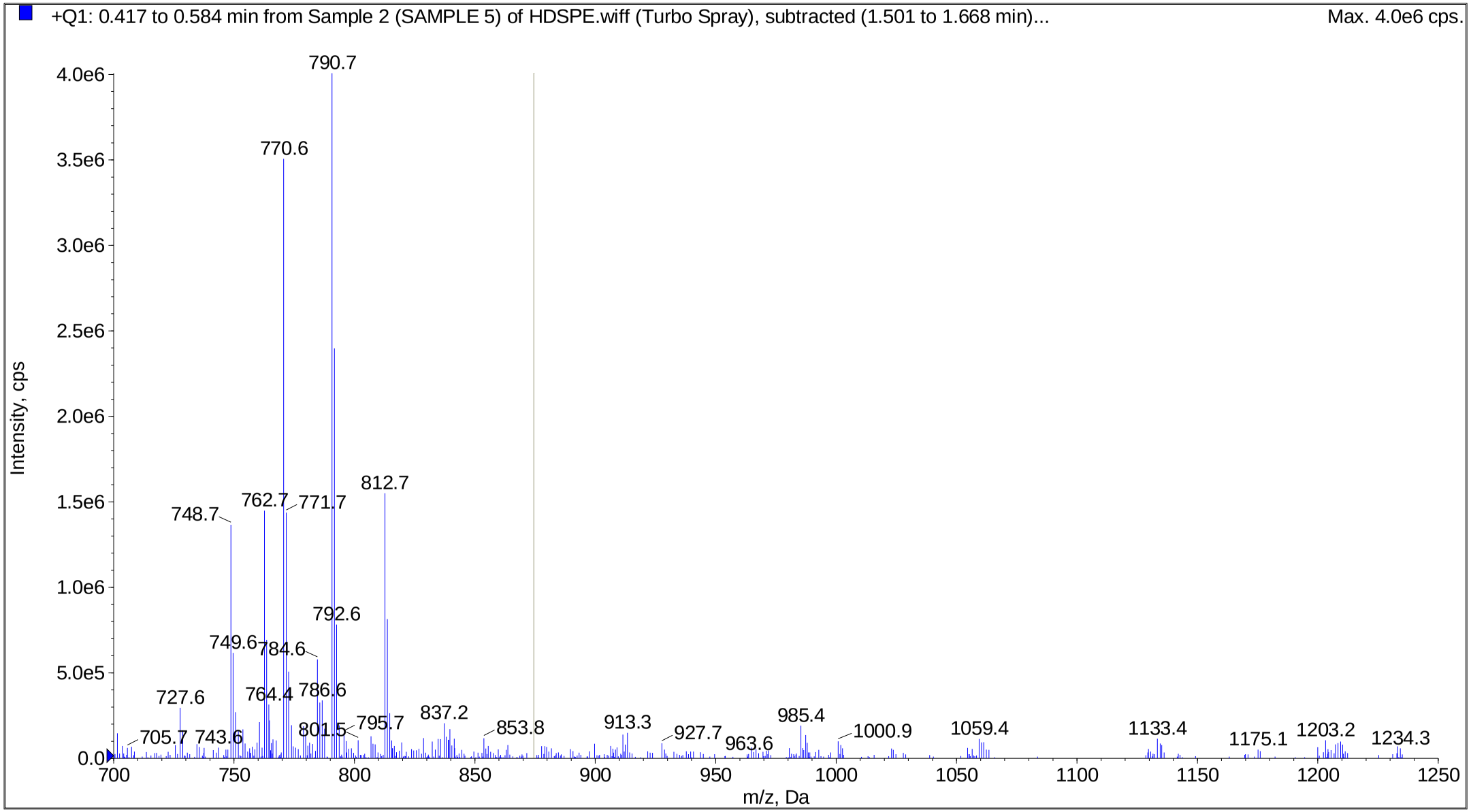
Analyst Version: 1.6.2

Sample Number: N/A
Sample Name: DSPE



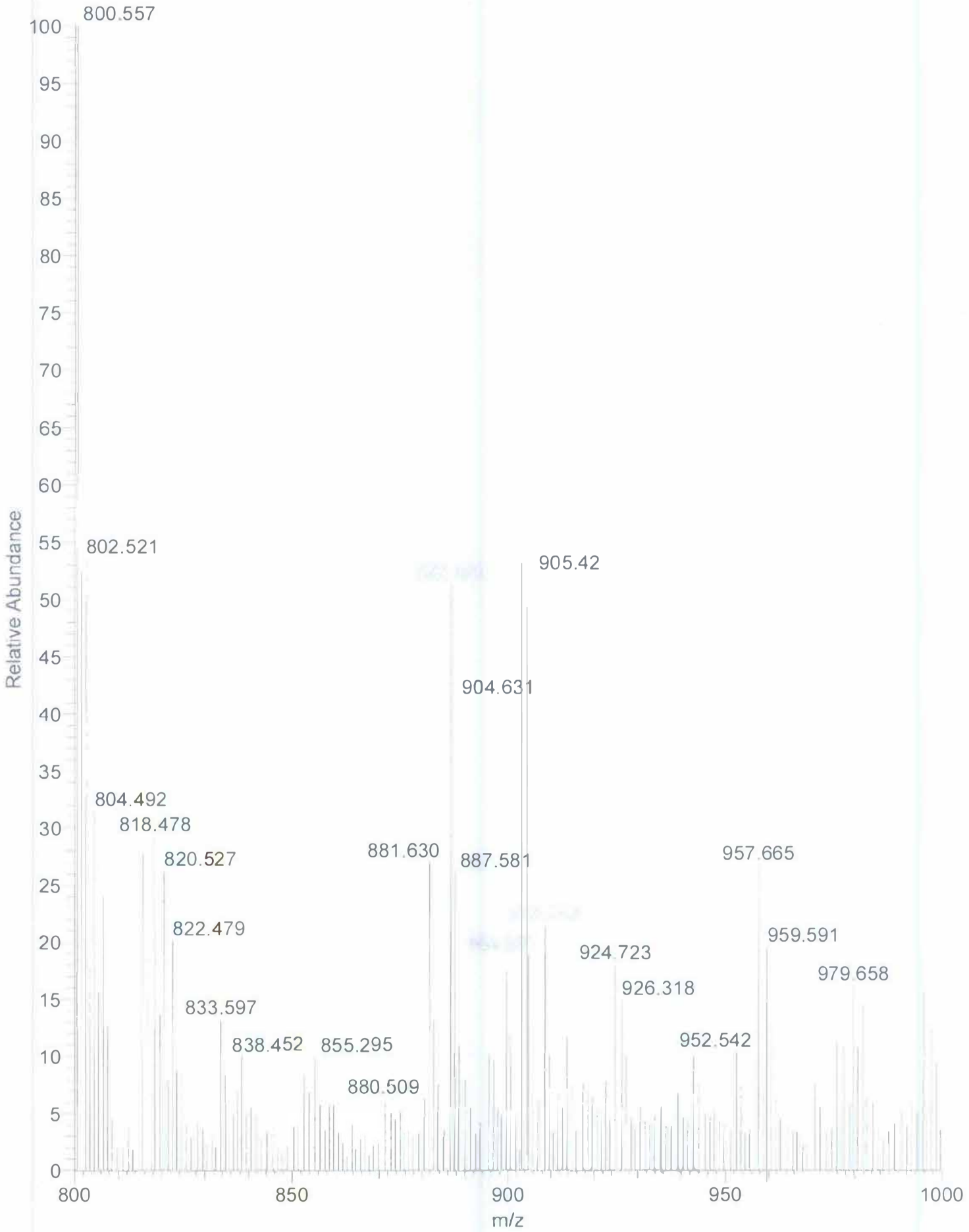
Analyst Version: 1.6.2

Sample Number: N/A
Sample Name: BHDS



Analyst Version: 1.6.2

Sample Number: N/A
Sample Name: HDS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959.591
924.723
979.658
926.318
833.597
952.542
838.452
855.295
880.509
Relative Abundance
m/z
100
95
90
85
80
75
70
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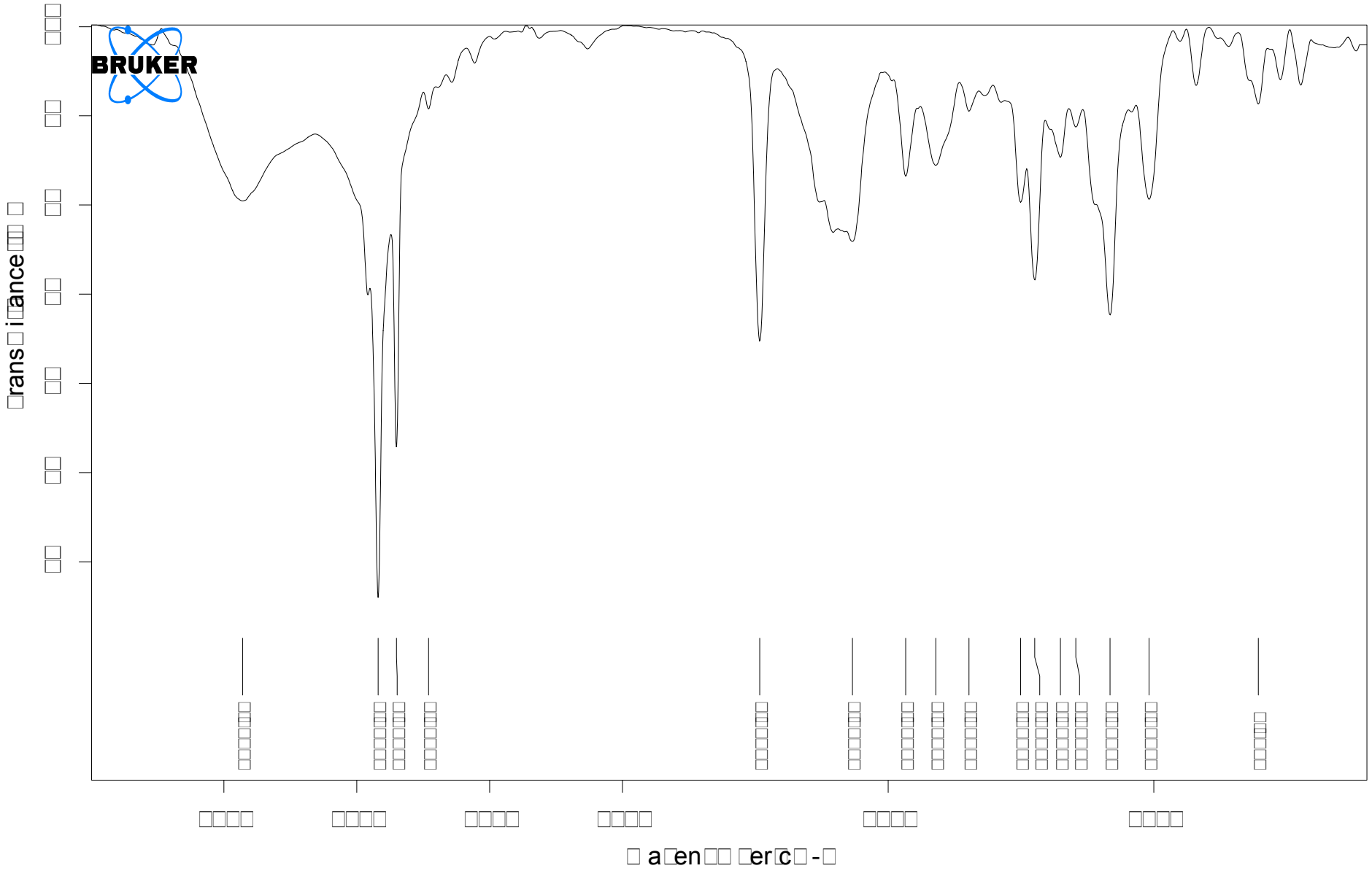
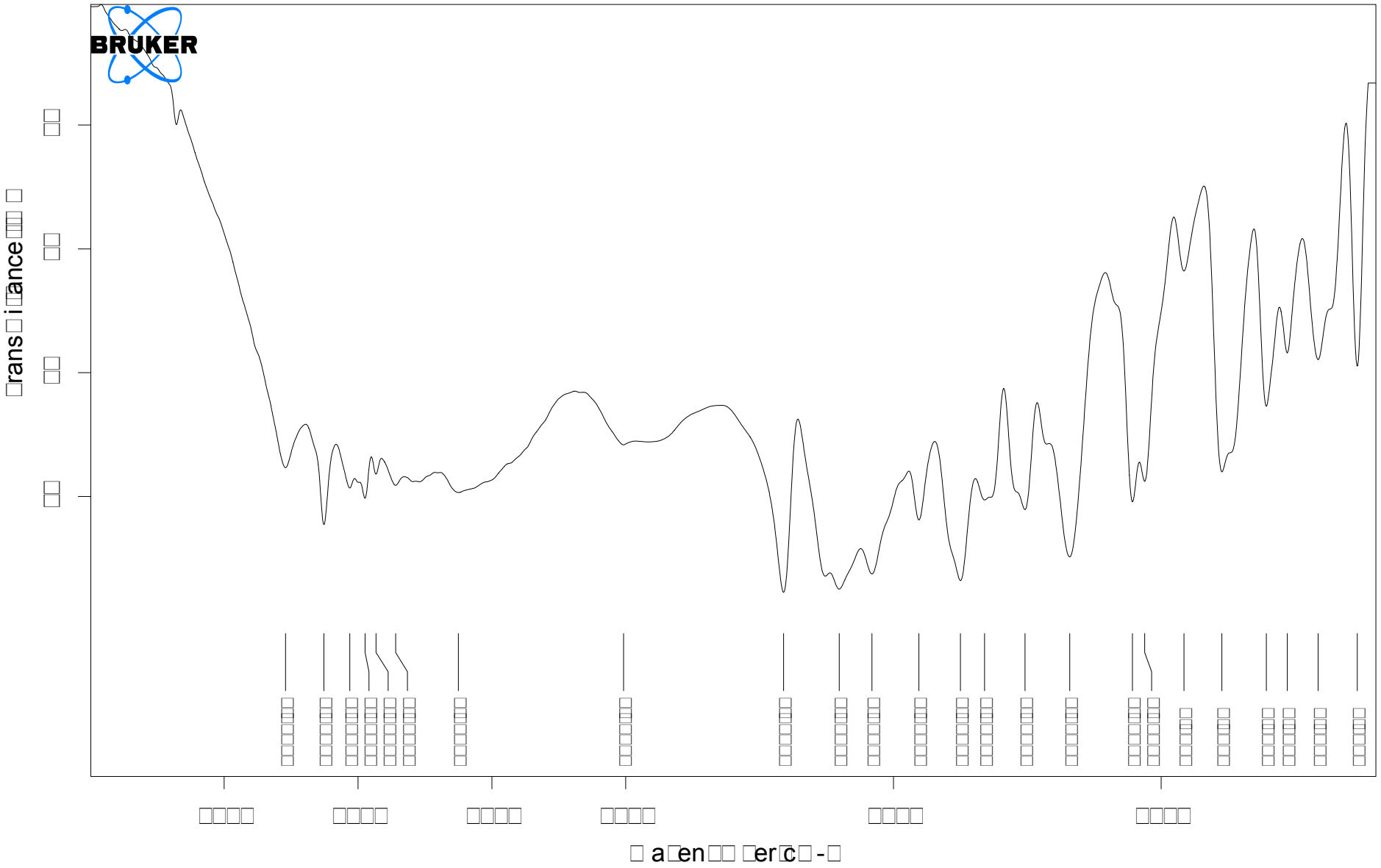
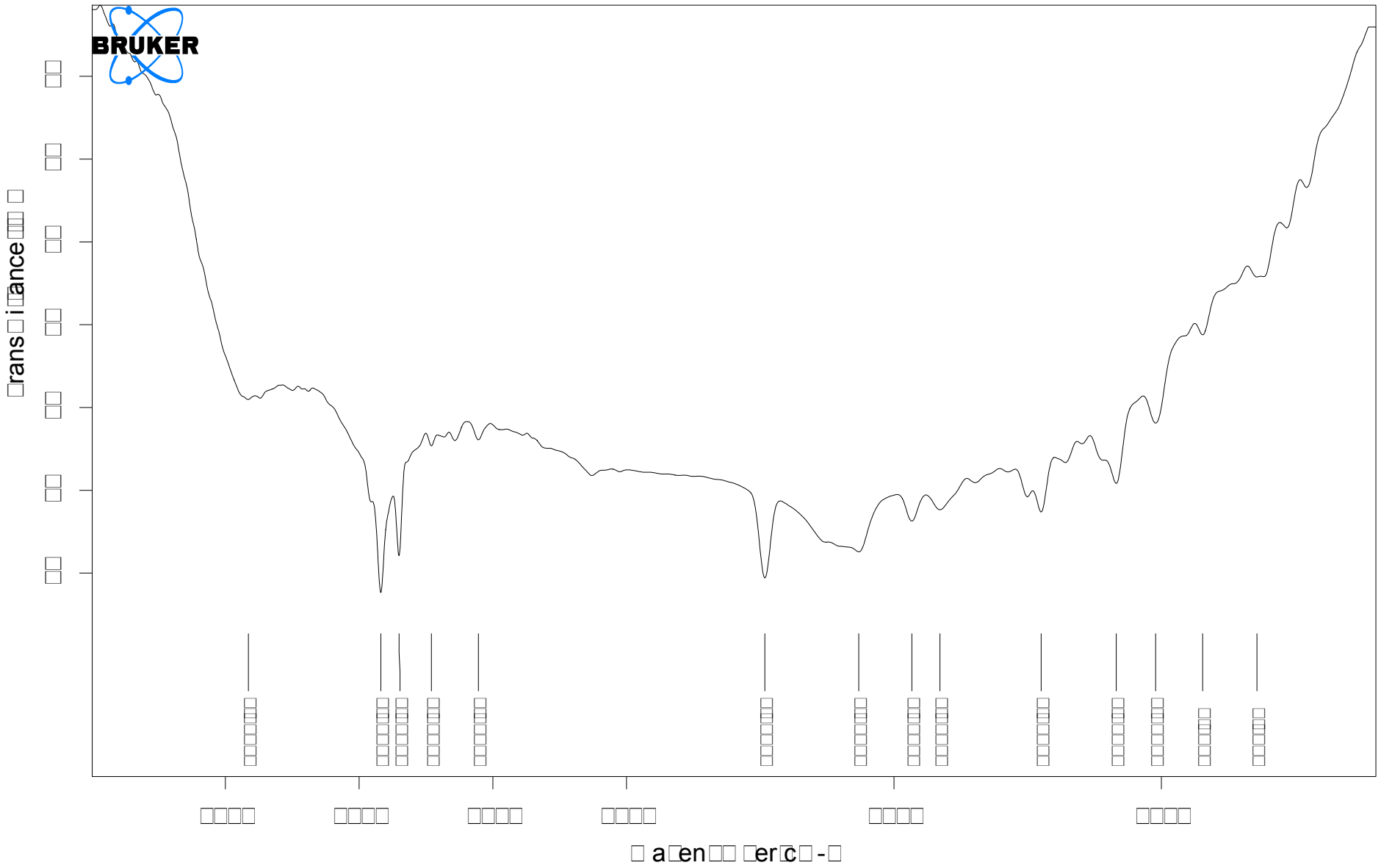
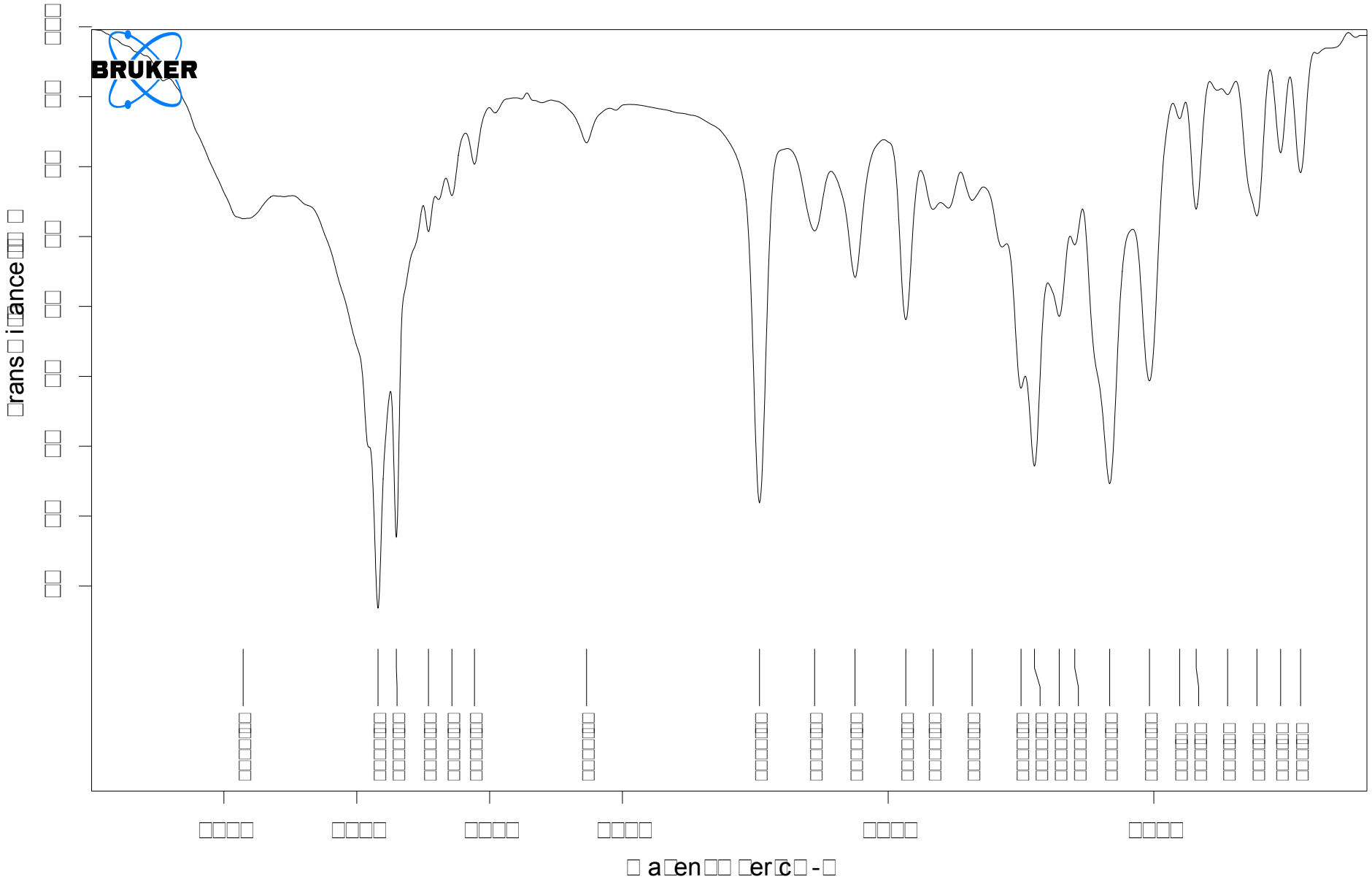
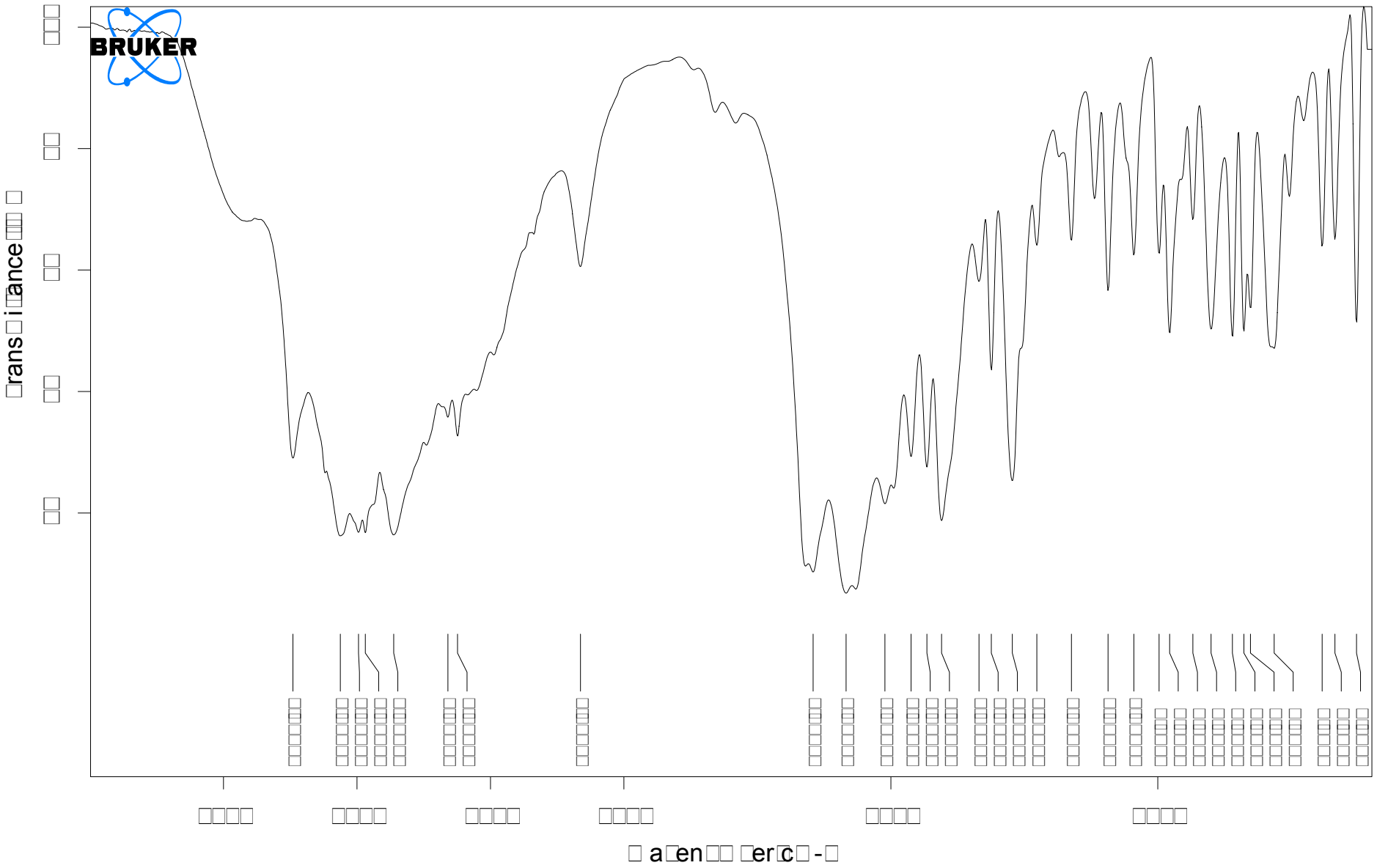


C ro ra ies O S M S DS e e	

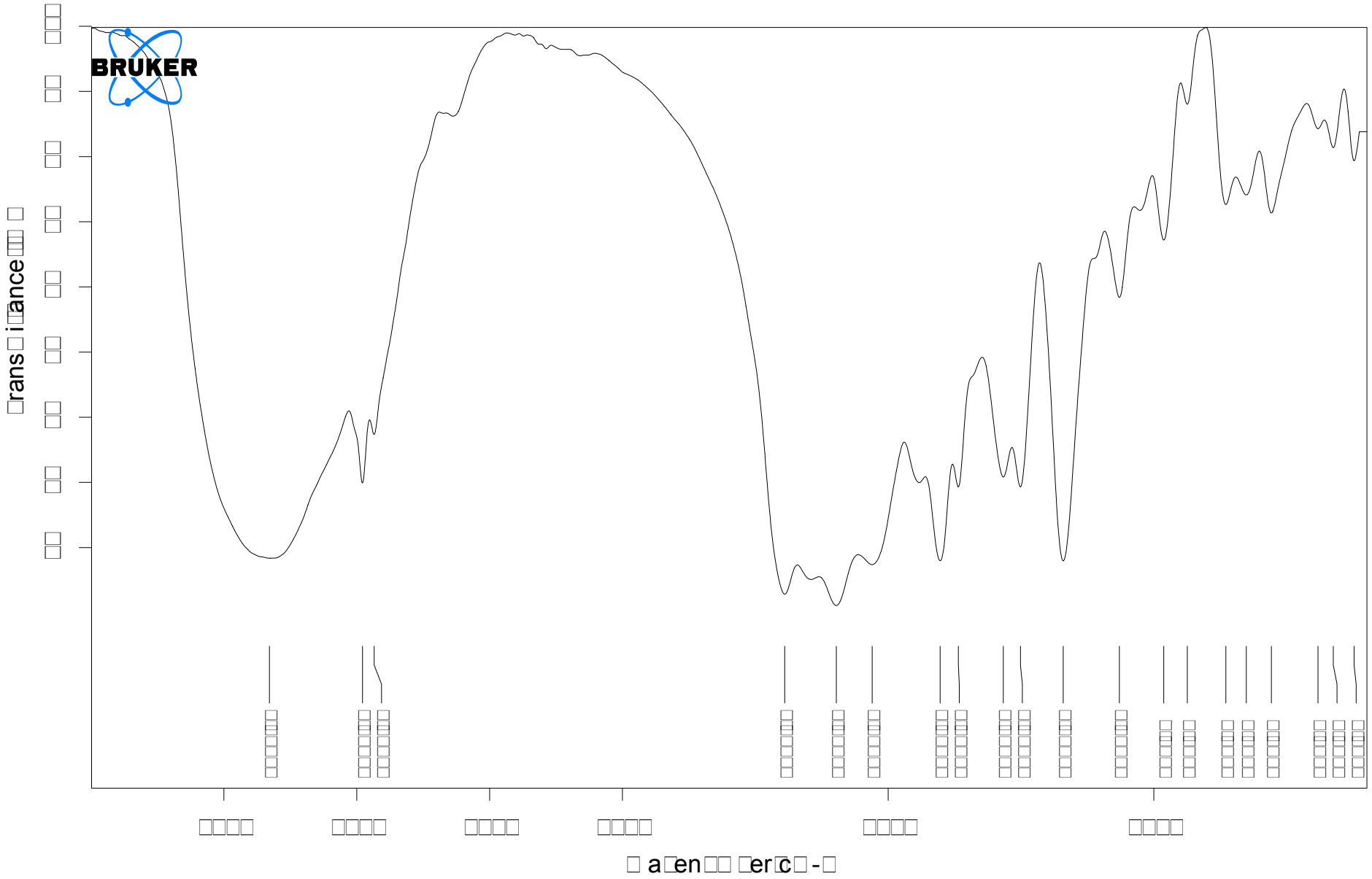



BRUKER

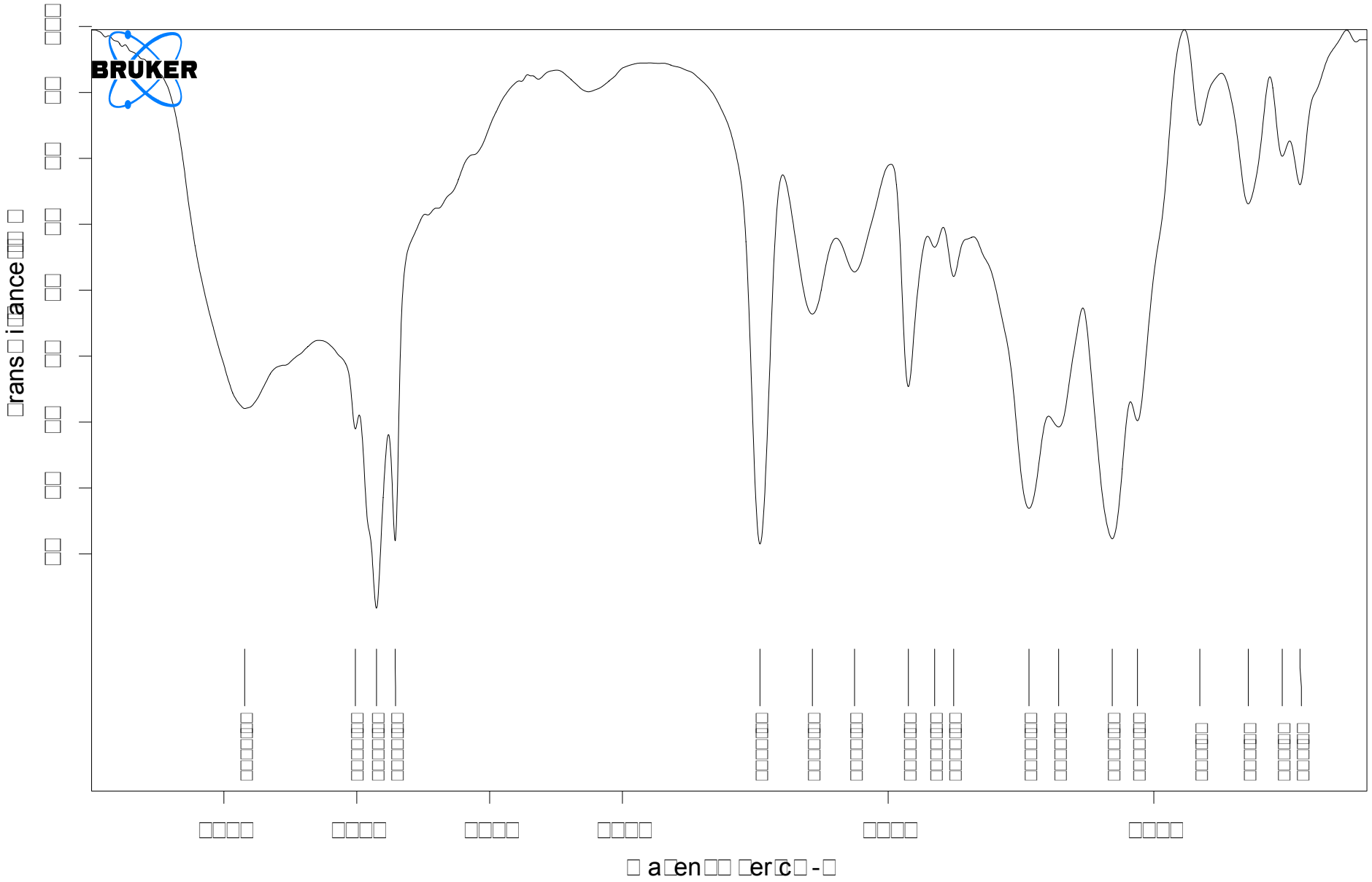




Carnosine	



C ro ra ies O S M S a cd oc-Carnosine e e	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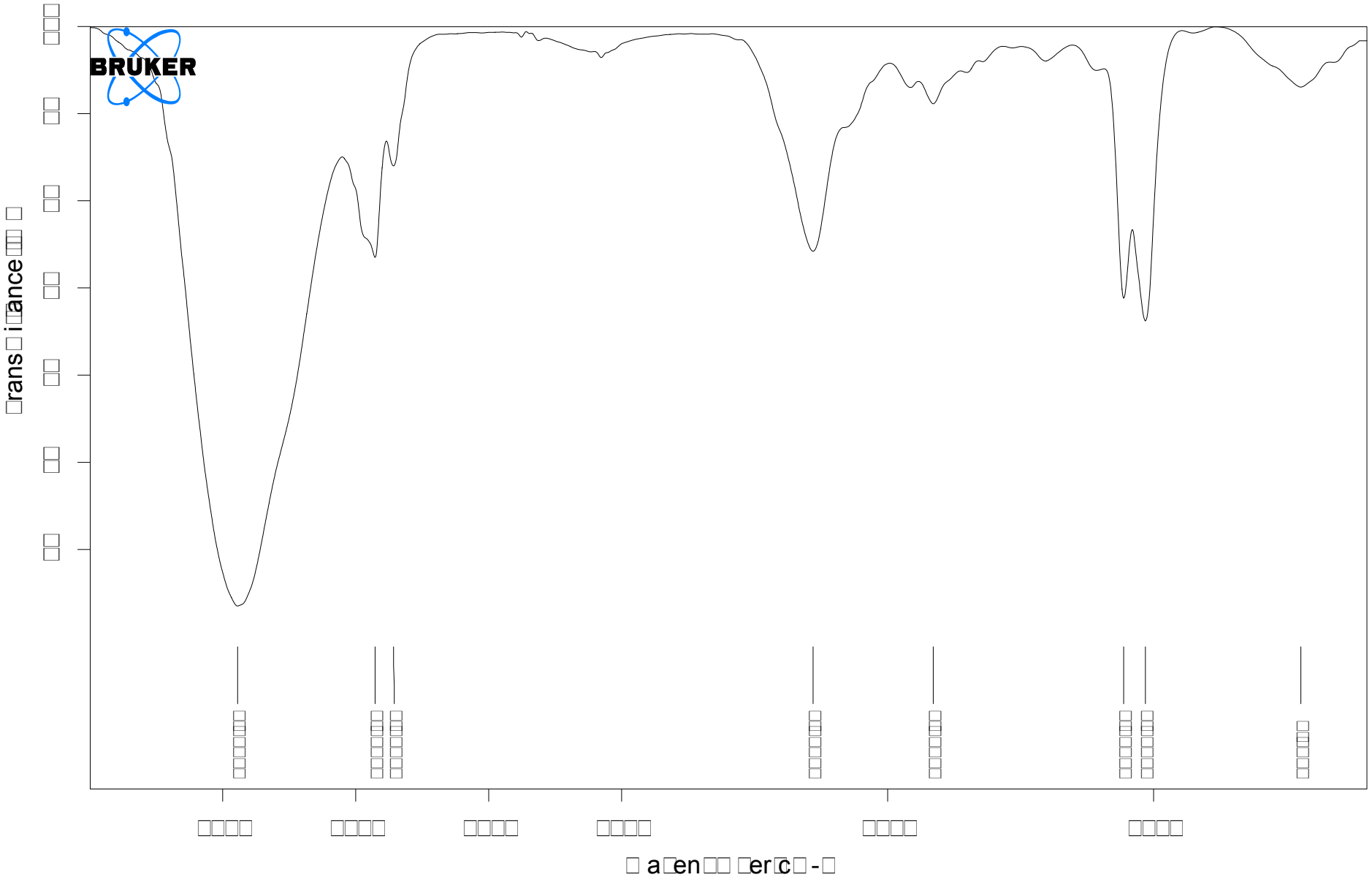
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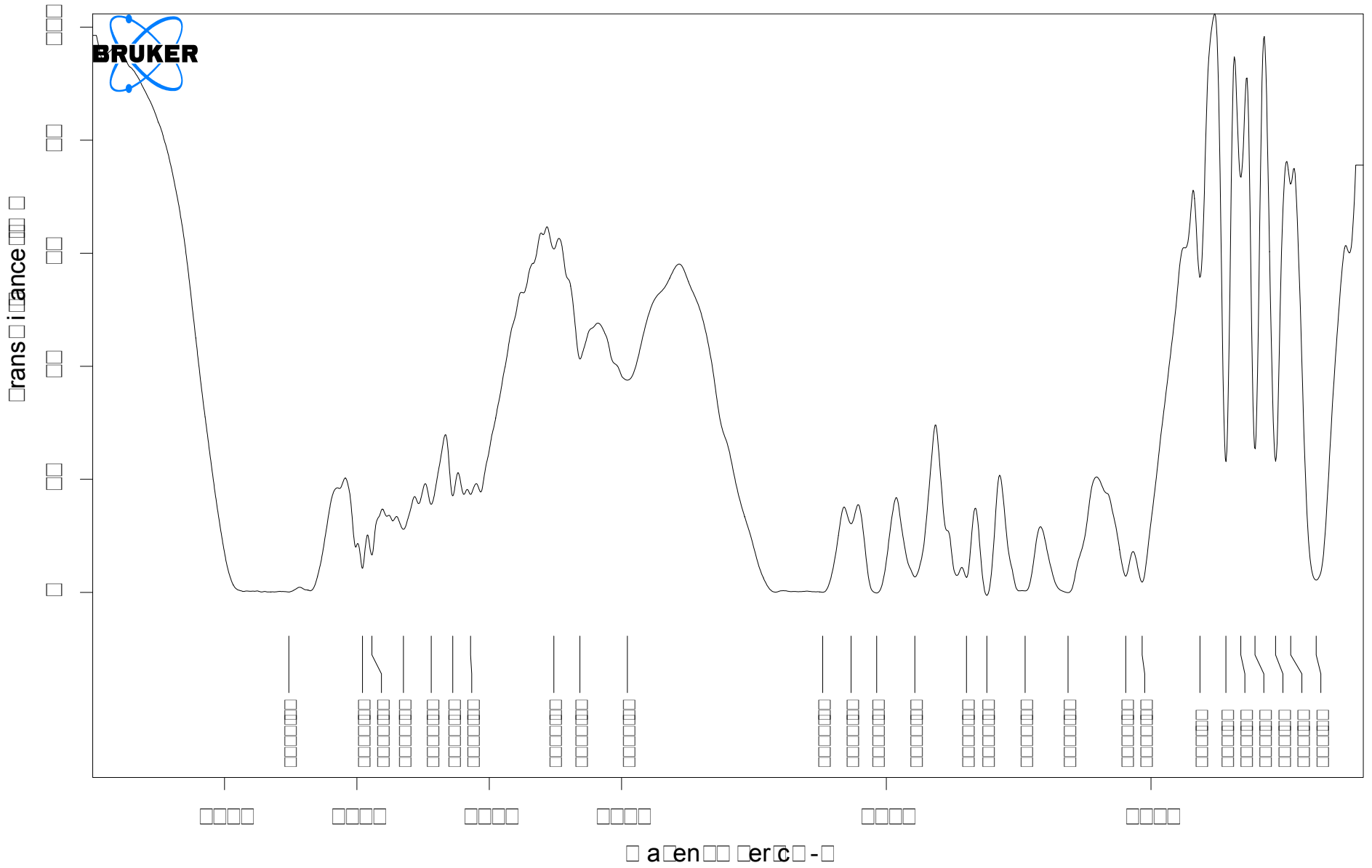
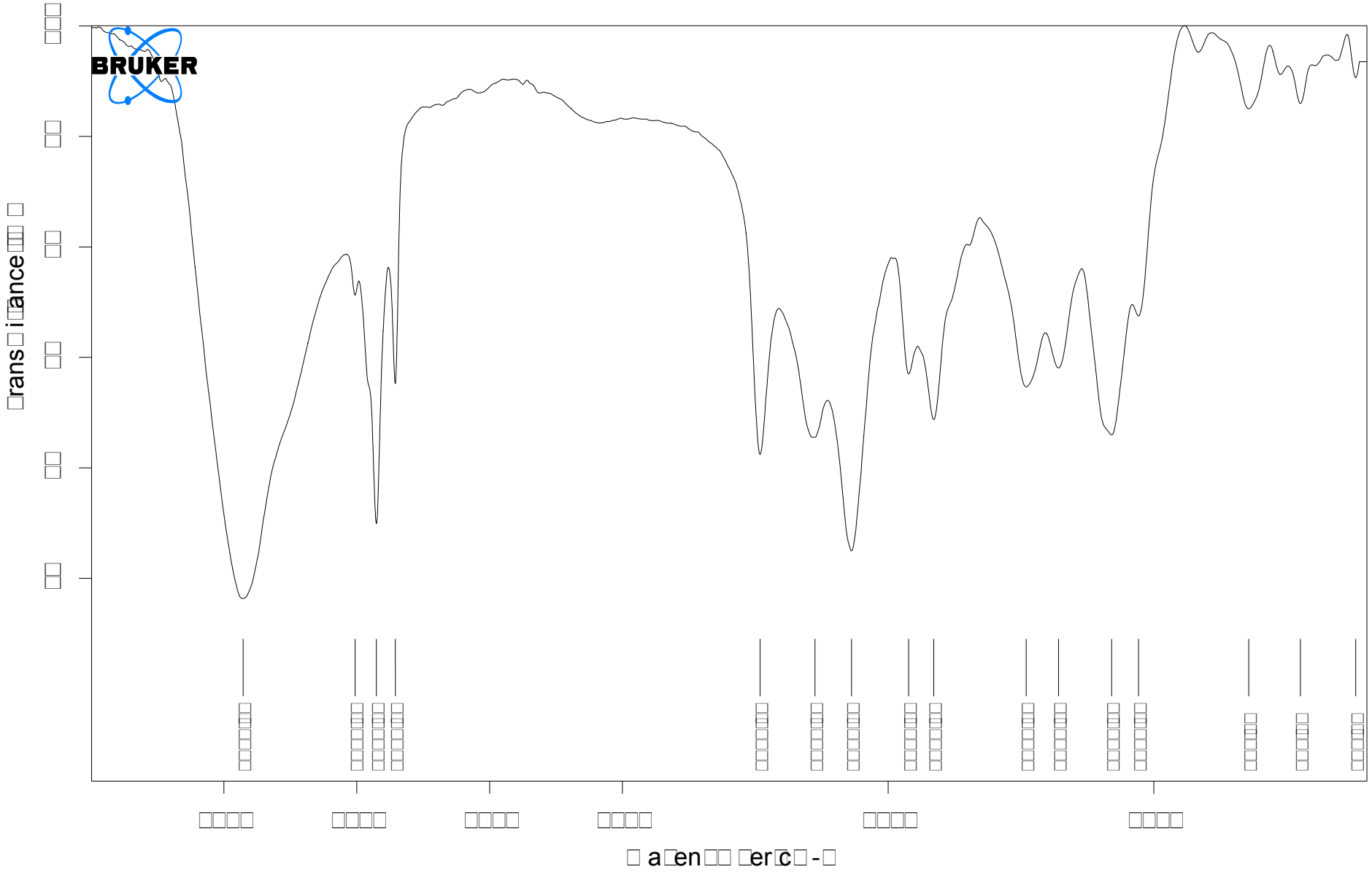
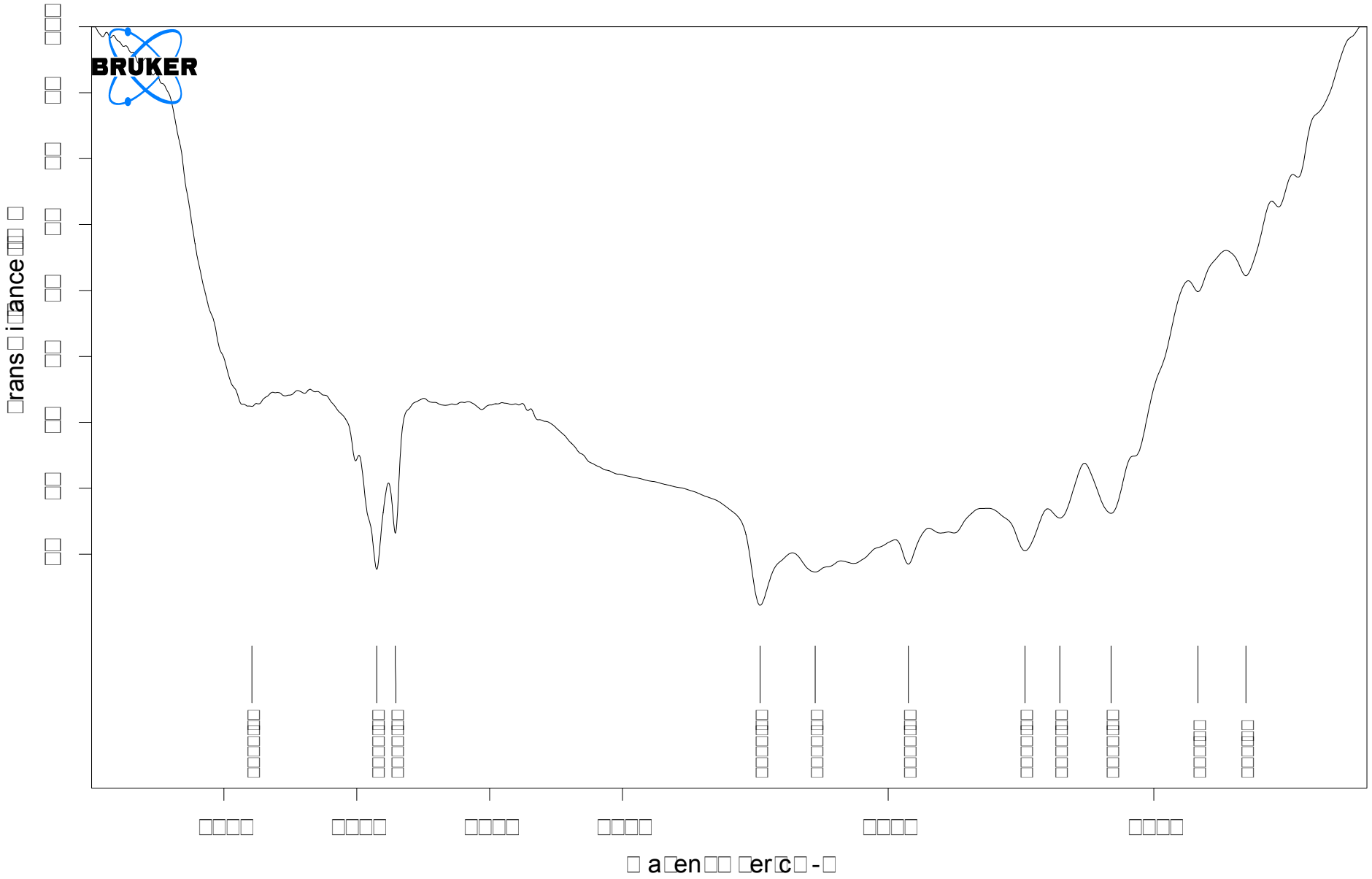


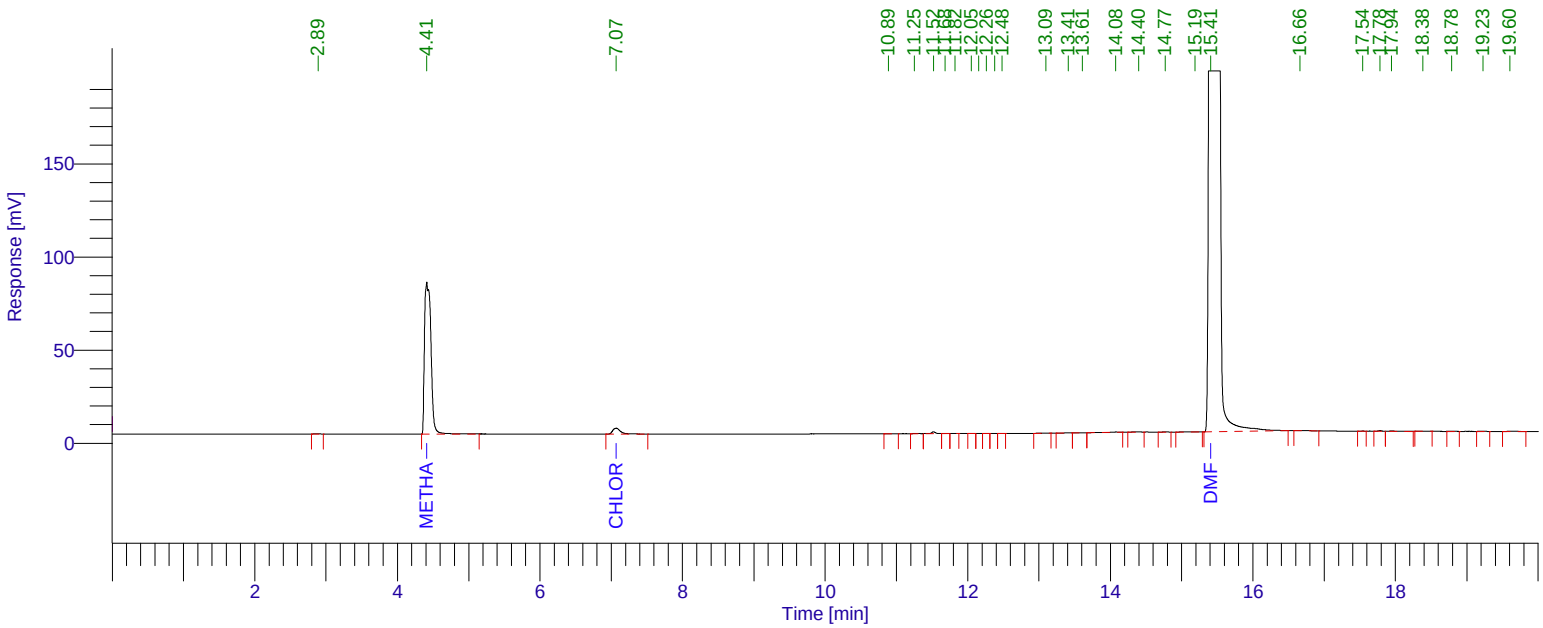


C ro ra ies O S M S a cd ADSPE e e	



Software Version	: 6.3.0.0445	Date	: 5/31/2016 11:12:20 AM
Sample Name	: BSTD-02	Data Acquisition Time	: 5/5/2016 9:38:44 PM
Instrument Name	: GC 01	Channel	: A
Rack/Vial	: 0/0	Operator	: PERKIN
Sample Amount	: 1.000000	Dilution Factor	: 1.000000
Cycle	: 1		

Result File :
Sequence File : D:\2016\SEQUENCE\Res Solvents_050516.seq



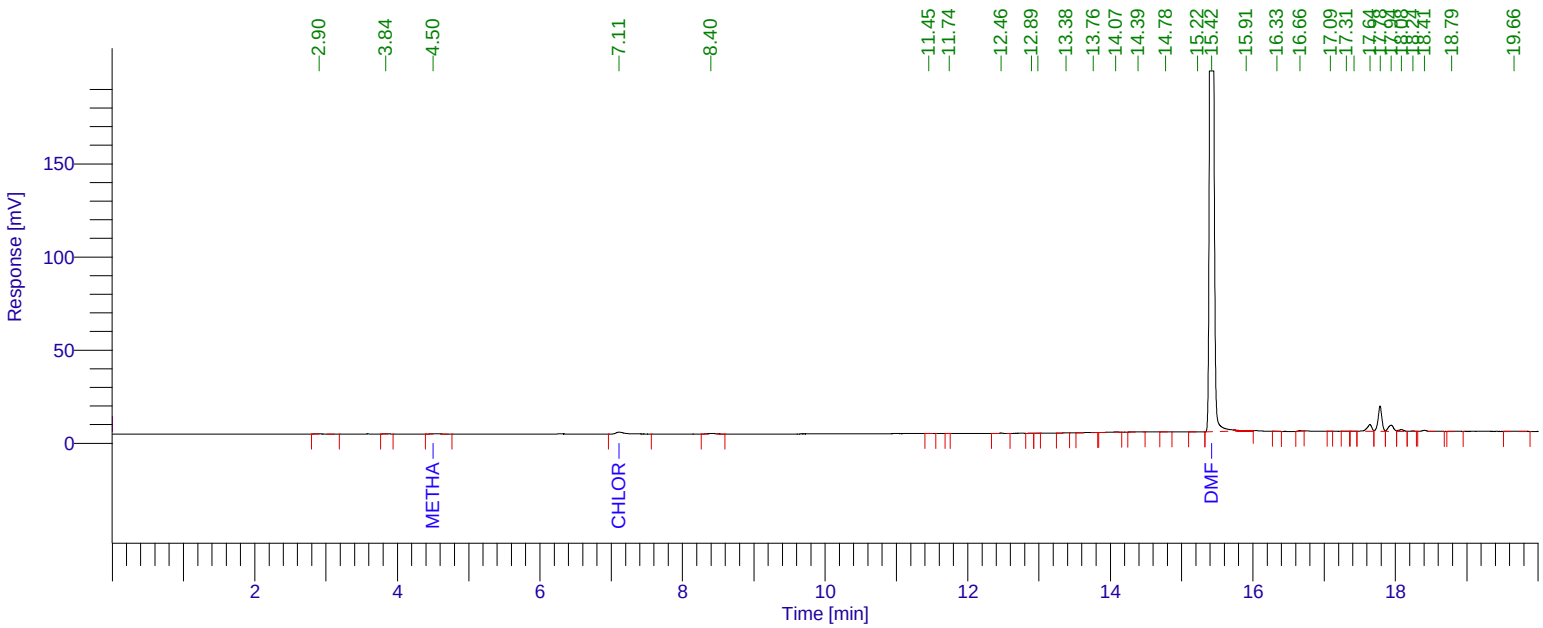
Methanol

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Area [%]
2	Methanol	4.411	510643.50	81539.84	5.57
3	Chloroform	7.069	23709.96	3166.65	0.26
21	DMF	15.408	8639248.22	987742.47	94.18
			9173601.68	1.07e+06	100.00

Warning -- Signal level out-of-range in peak

Software Version	: 6.3.0.0445	Date	: 5/31/2016 11:07:22 AM
Sample Name	: SPL-1-2	Data Acquisition Time	: 5/5/2016 5:08:54 PM
Instrument Name	: GC 01	Channel	: A
Rack/Vial	: 0/0	Operator	: PERKIN
Sample Amount	: 1.000000	Dilution Factor	: 1.000000
Cycle	: 1		

Result File :
Sequence File : D:\2016\SEQUENCE\Res Solvents_050516.seq



Methanol

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Area [%]
3	Methanol	4.498	1370.35	146.64	0.08
4	Chloroform	7.107	313.67	28.96	0.01
17	DMF	15.418	1789570.09	540355.77	99.91
			1799554.10	541531.38	100.00