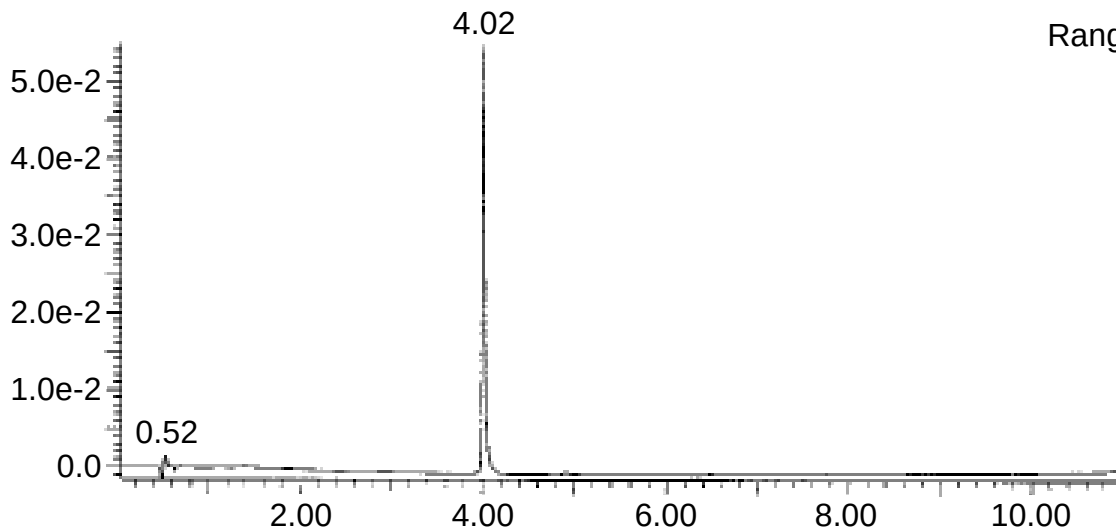


Fig. 1-1

TPV06

Range: 6e-2



TPV10

Range: 1e-1

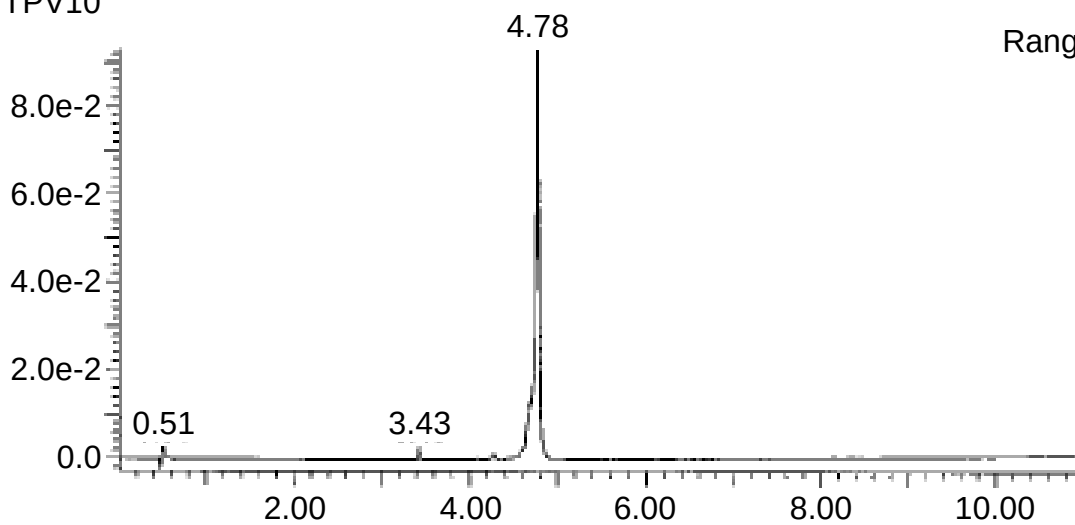
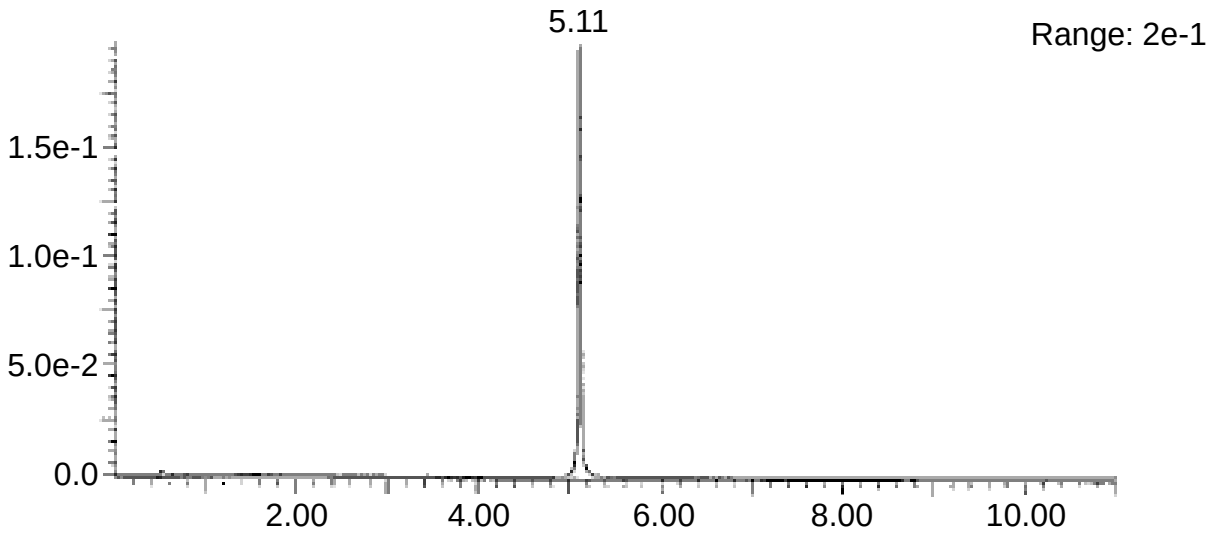


Fig. 1-2

TPV12



TPV21

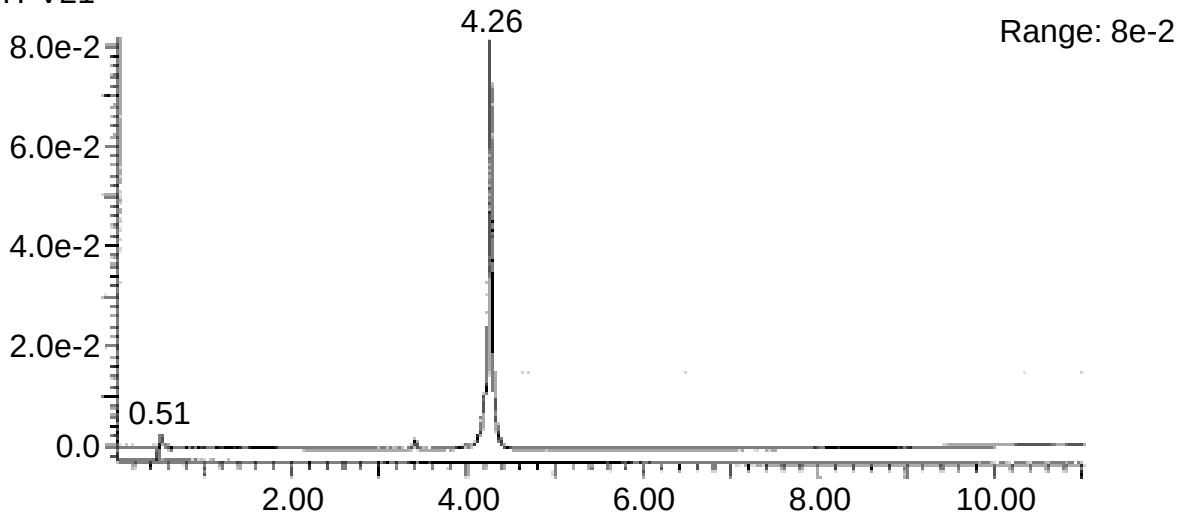
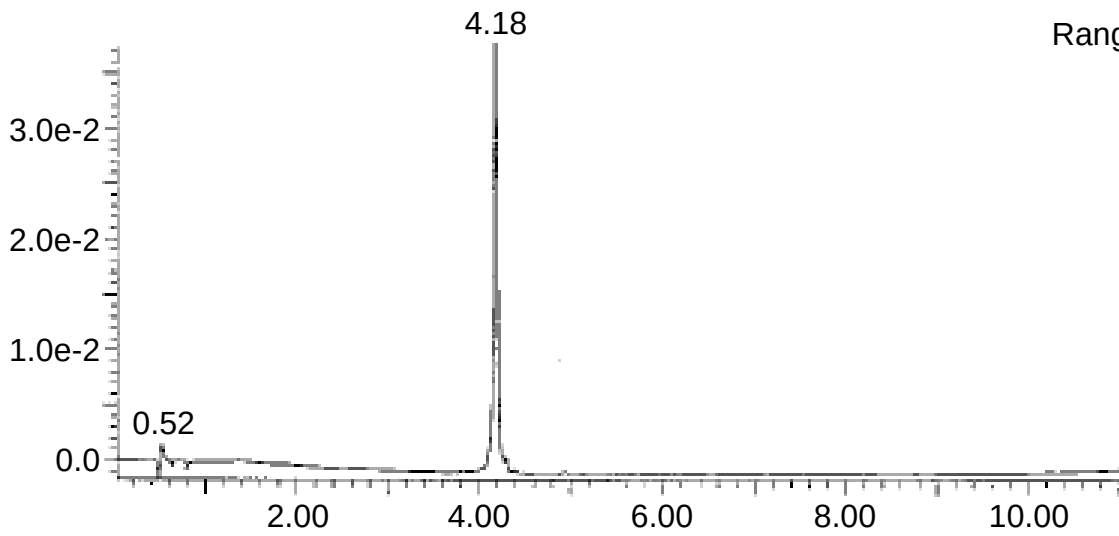


Fig. 1-3

TPV26

Range: 4e-2



TPV30

Range: 2e-2

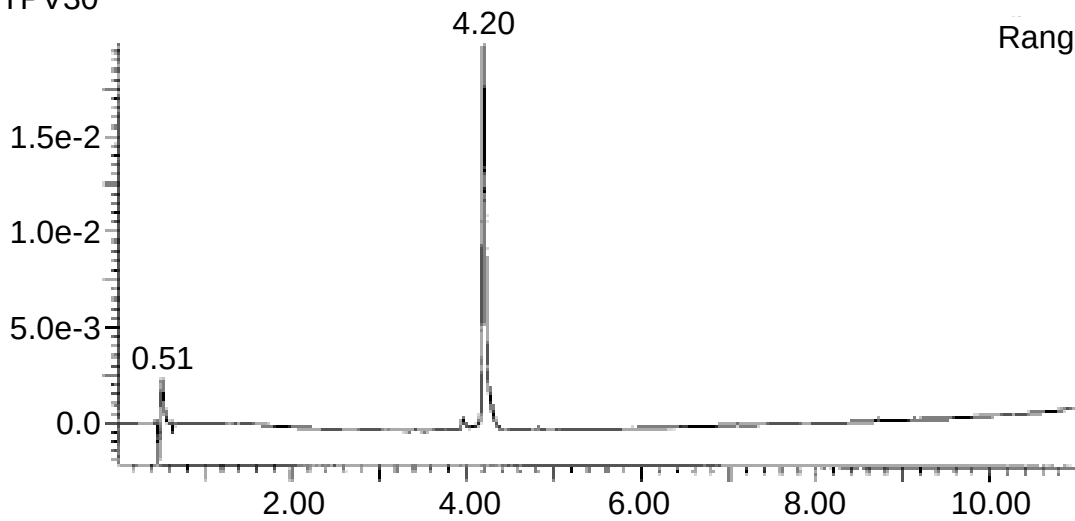
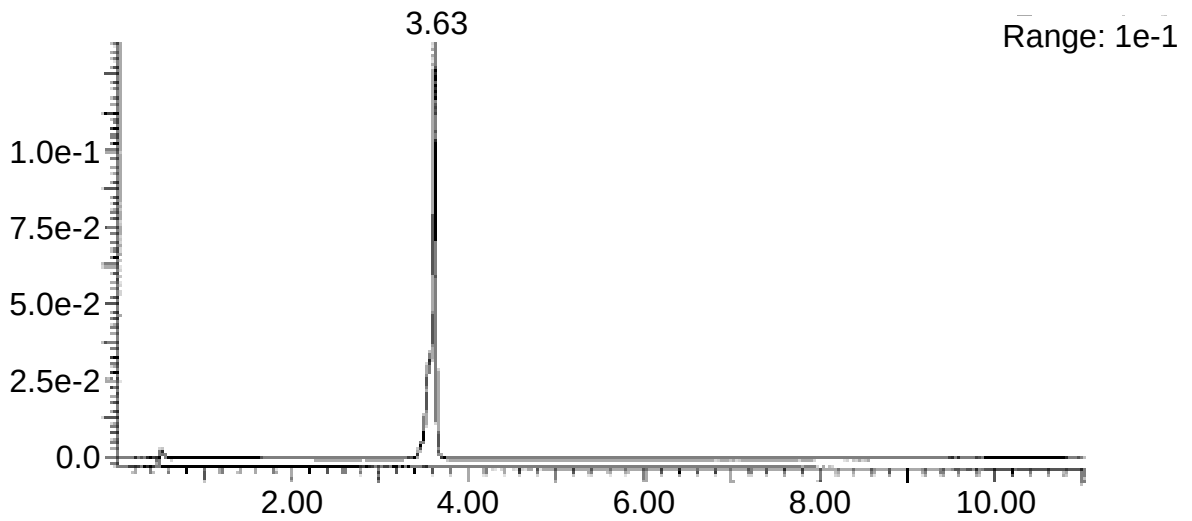


Fig. 1-4

TPV35



TPV37

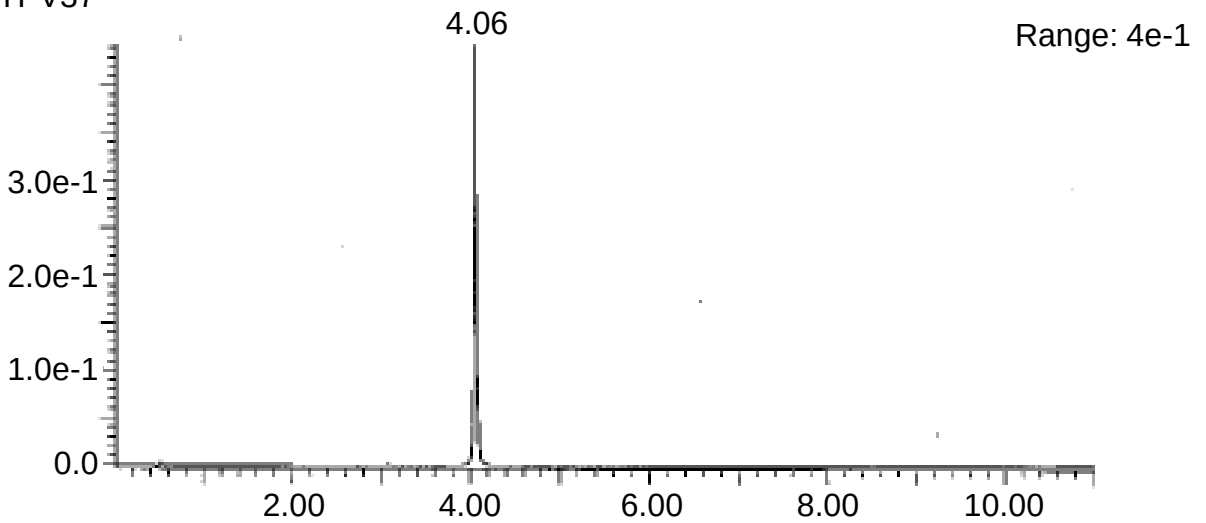
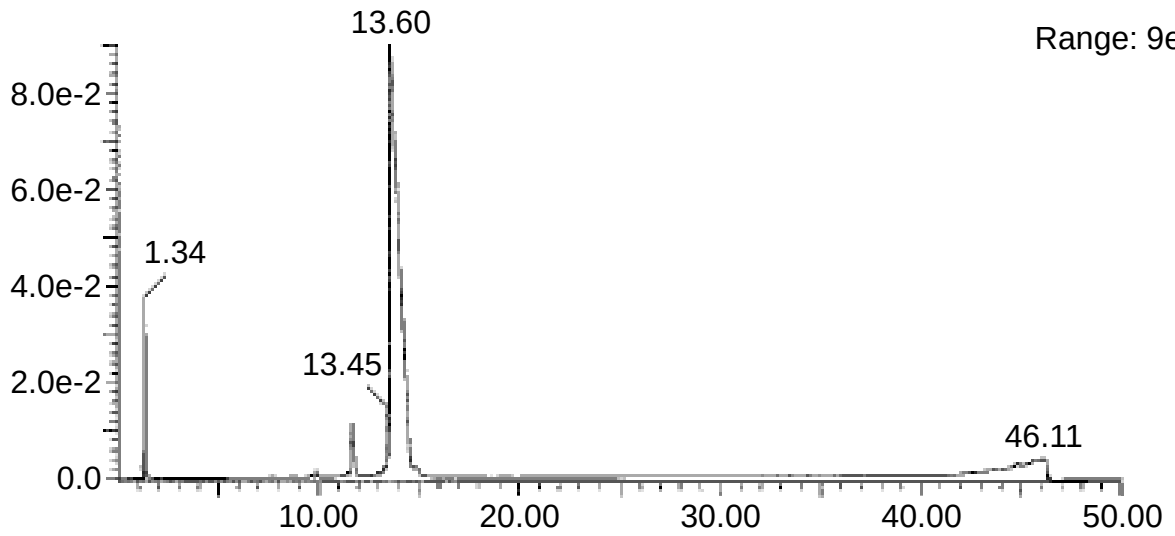


Fig. 1-5

TPV39

Range: 9e-2



TPV40

Range: 1e-1

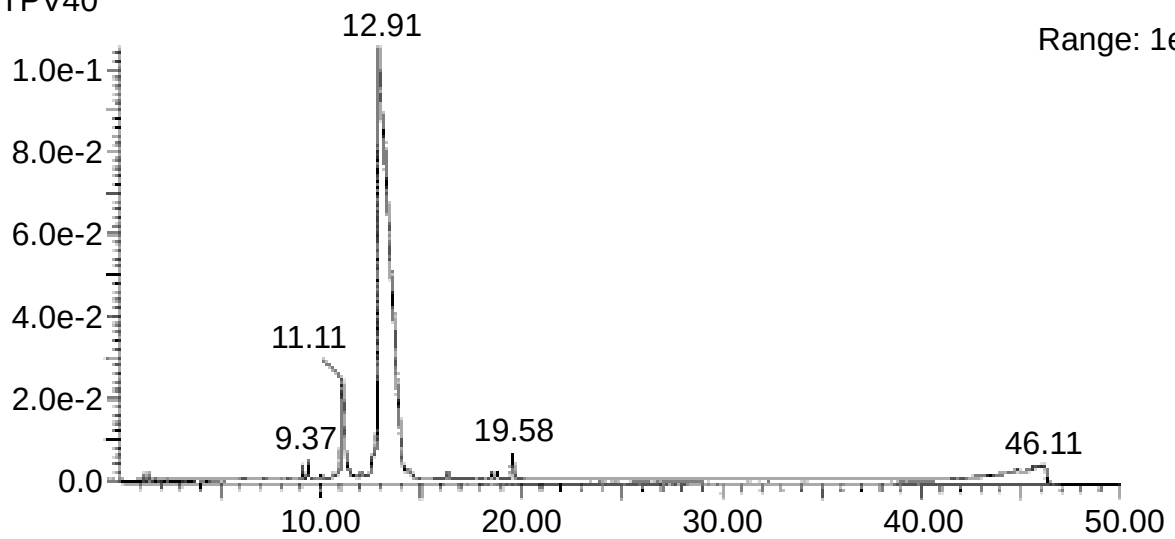
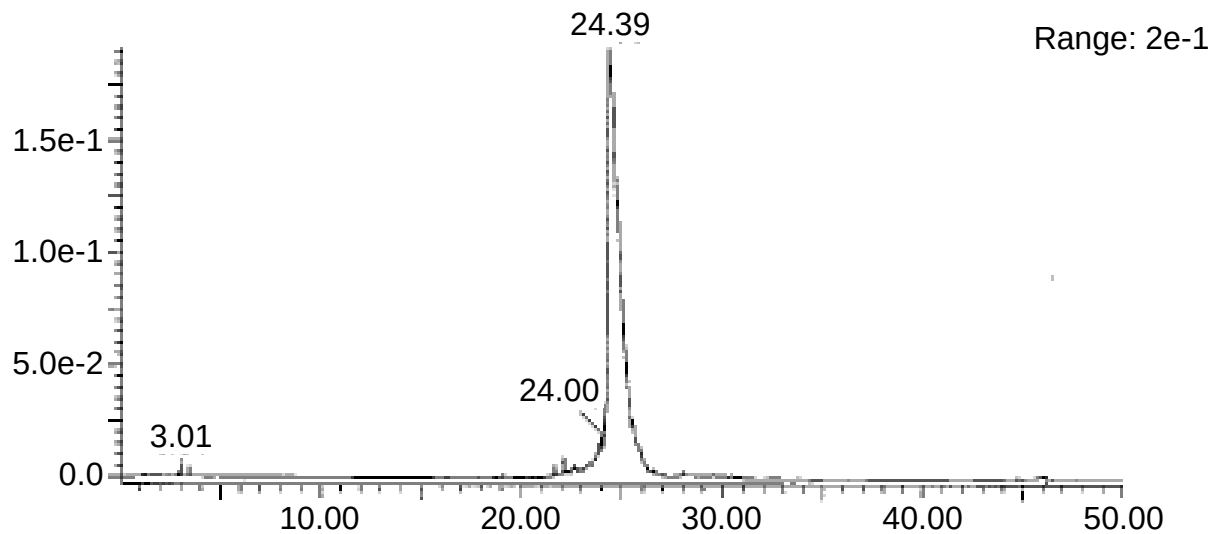


Fig. 1-6

TPV41



TPV43

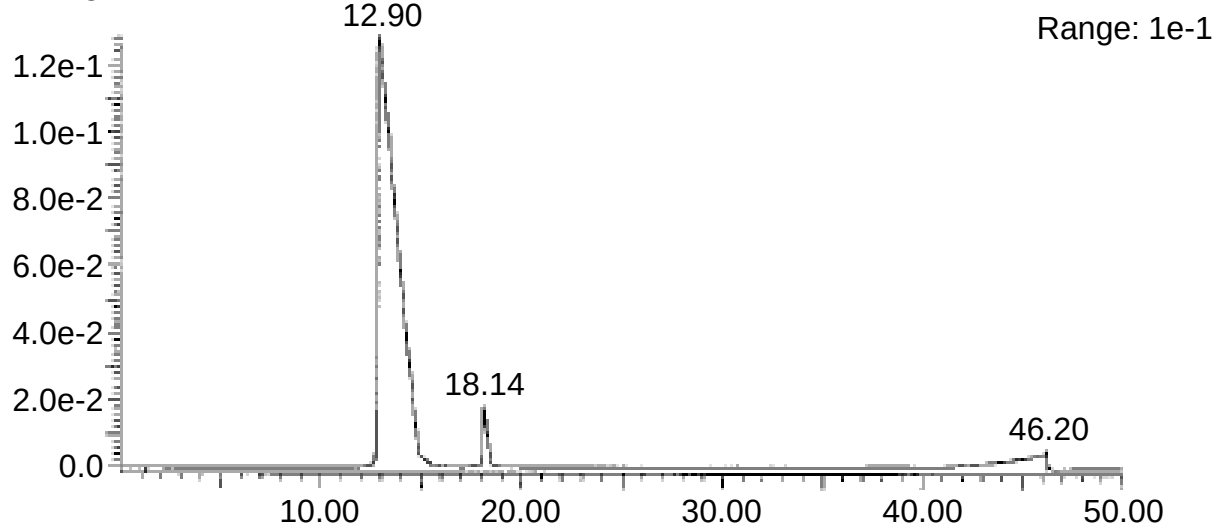


Fig. 1-7

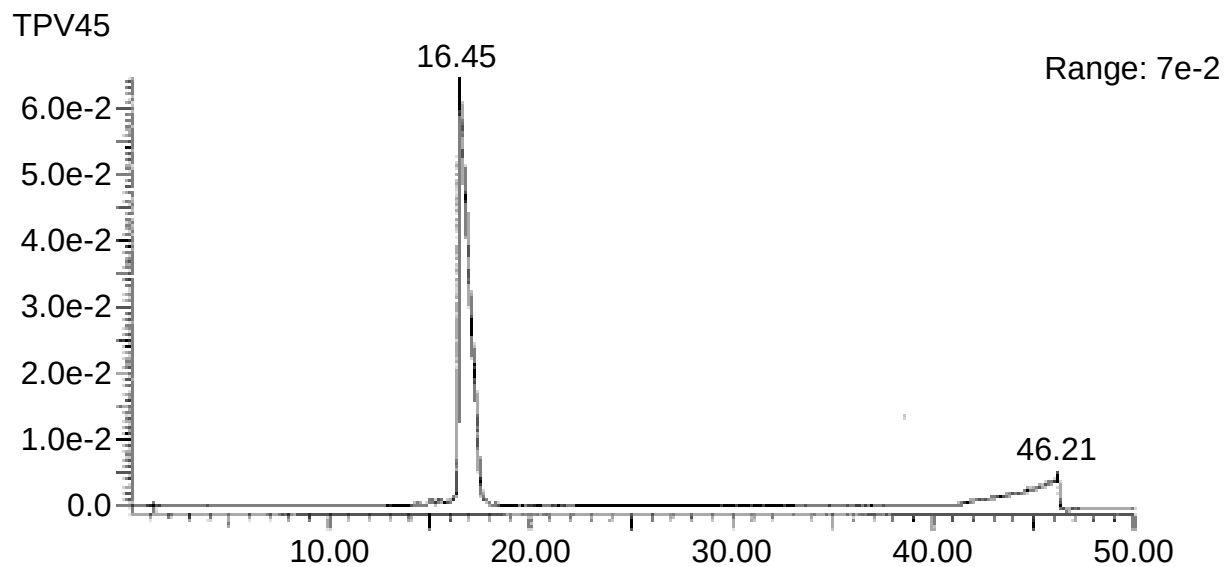


Fig. 2-1

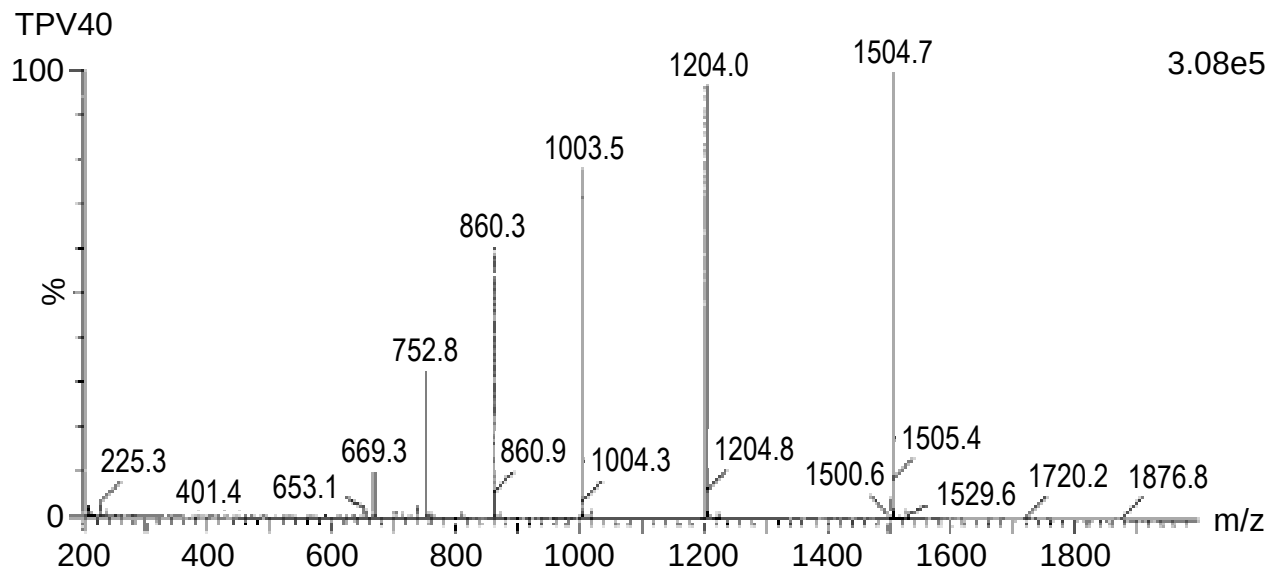
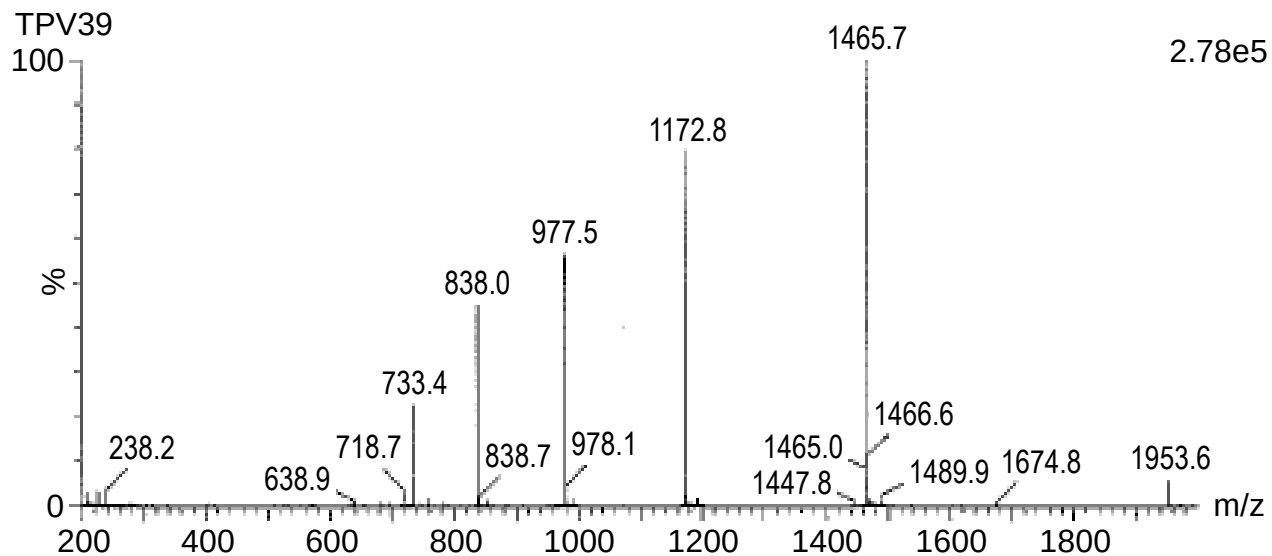


Fig. 2-2

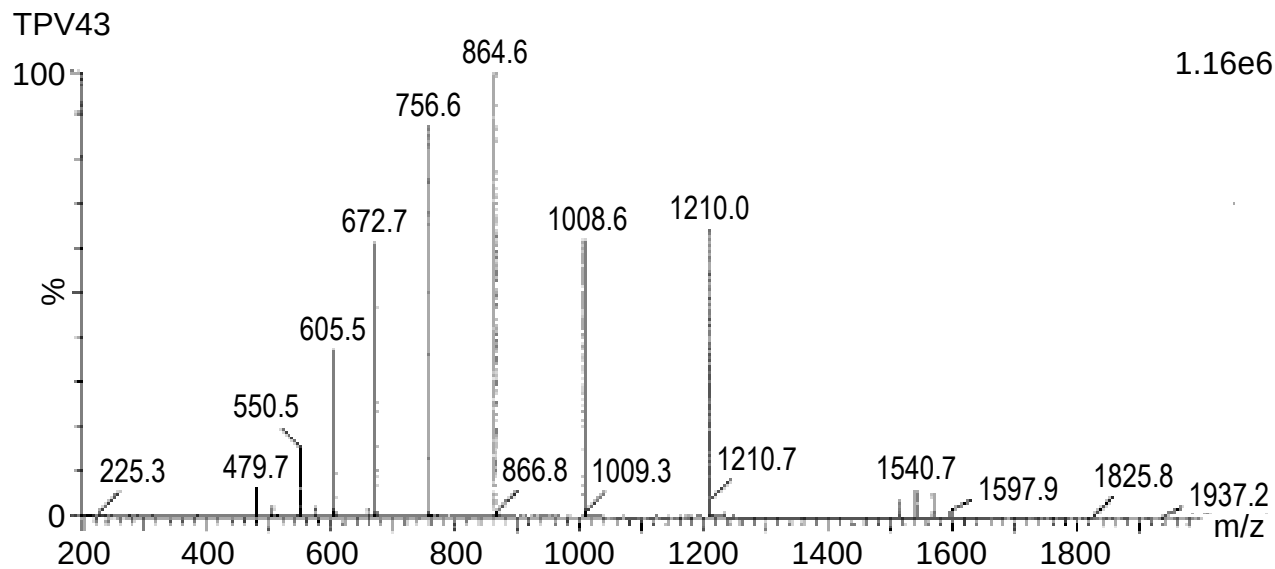
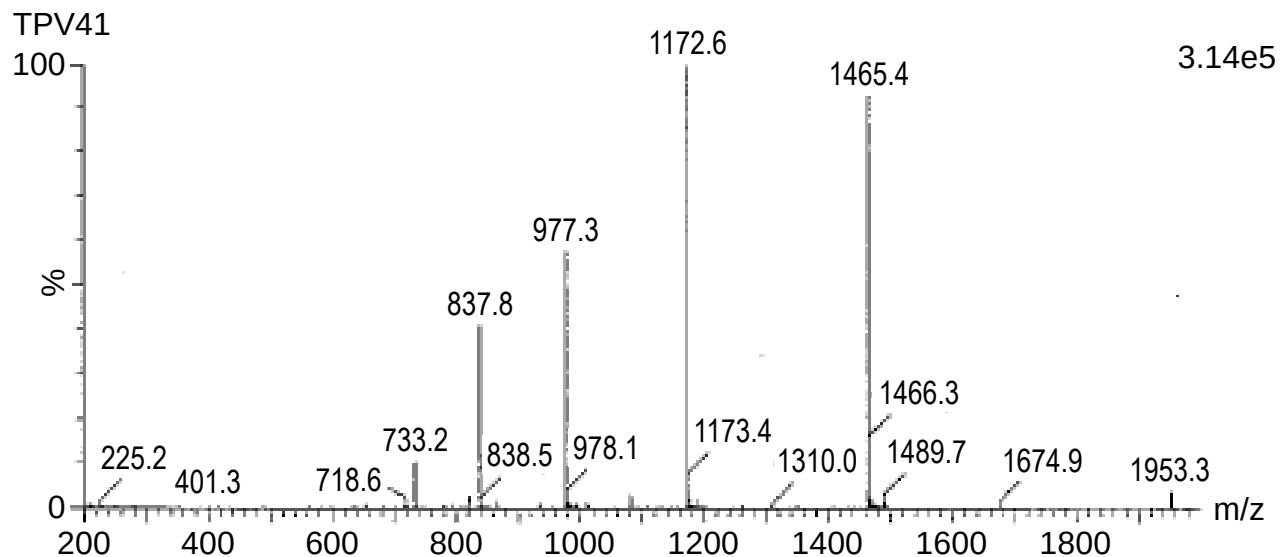


Fig. 2-3

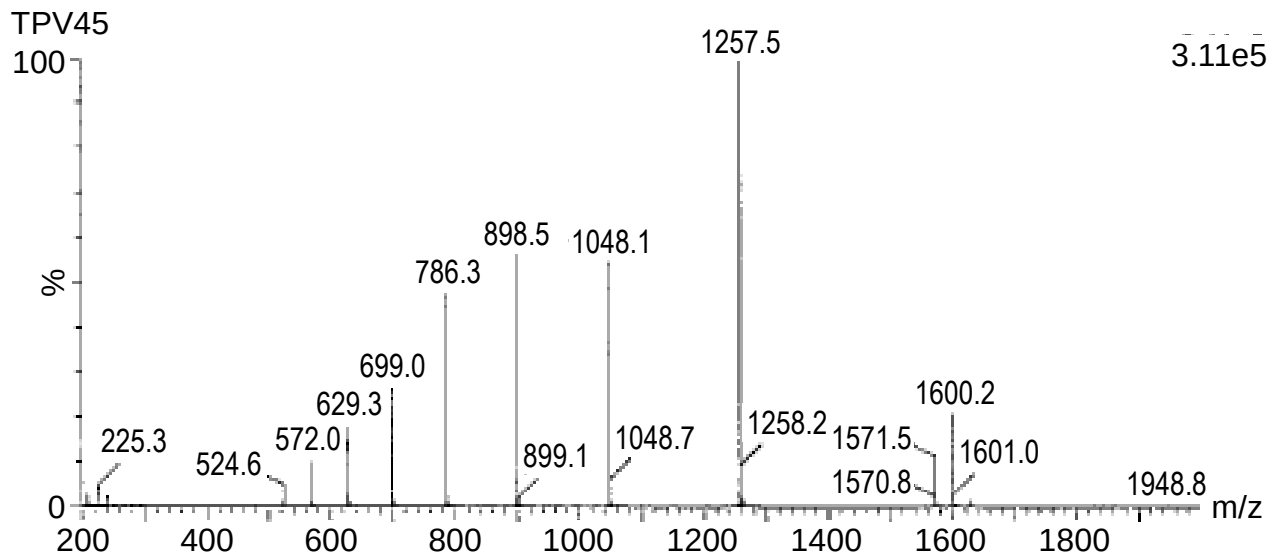


Fig. 3-1

Conjugate administered	Epitope specific CTL induction				PEP2 cleaved with i20S	PEP10 cleaved with i20S
	N terminus			C terminus		
TPV01	PEP5	PEP6	PEP9*	PEP4		
TPV02	PEP9*	PEP5	PEP6	PEP4		
TPV03	PEP6	PEP5	PEP9*	PEP4		
TPV04	PEP6	PEP9*	PEP5	PEP4		
TPV05	PEP9*	PEP6	PEP5	PEP4		
TPV06	PEP5	PEP9*	PEP6	PEP4		
TPV07	PEP1	PEP7	PEP8*	PEP2*	○	
TPV08	PEP1	PEP8*	PEP7	PEP2*	○	
TPV09	PEP7	PEP1	PEP8*	PEP2*	○	
TPV10	PEP8*	PEP7	PEP1	PEP2*	○	
TPV11	PEP8*	PEP1	PEP7	PEP2*	○	
TPV12	PEP7	PEP13	PEP8*	PEP2*	○	
TPV13	PEP8*	PEP13	PEP7	PEP2*	○	
TPV14	PEP13	PEP7	PEP8*	PEP2*	○	
TPV15	PEP8*	PEP7	PEP13	PEP2*	○	
TPV16	PEP13	PEP8*	PEP7	PEP2*	○	
TPV17	PEP13	PEP15	PEP18	PEP10*		○
TPV18	PEP13	PEP18	PEP15	PEP10*		○
TPV19	PEP15	PEP13	PEP18	PEP10*		○

Fig. 3-2

	Epitope specific CTL induction				PEP2 cleaved with i20S	PEP10 cleaved with i20S
Conjugate administered	N terminus		C terminus			
TPV20	PEP15	PEP18	PEP13	PEP10*		○
TPV21	PEP18	PEP13	PEP15	PEP10*		○
TPV22	PEP18	PEP15	PEP13	PEP10*		○
TPV23	PEP1	PEP15	PEP18	PEP10*		○
TPV24	PEP1	PEP18	PEP15	PEP10*		○
TPV25	PEP15	PEP1	PEP18	PEP10*		○
TPV26	PEP15	PEP18	PEP1	PEP10*		○
TPV27	PEP18	PEP1	PEP15	PEP10*		○
TPV28	PEP18	PEP15	PEP1	PEP10*		○
TPV29	PEP15	PEP17	PEP13	PEP10*		*
TPV30	PEP15	PEP13	PEP17	PEP10*		*
TPV31	PEP17	PEP15	PEP13	PEP10*		*
TPV32	PEP17	PEP13	PEP15	PEP10*		*
TPV33	PEP13	PEP17	PEP15	PEP10*		*
TPV34	PEP13	PEP15	PEP17	PEP10*		*
TPV37	PEP1	PEP7	PEP6	PEP5		
TPV38	PEP7	PEP1	PEP6	PEP5		
TPV35	PEP6	PEP18	PEP5	PEP9*		
TPV36	PEP6	PEP5	PEP18	PEP9*		

Fig. 3-3

Conjugate administered	Epitope specific CTL induction				PEP2 cleaved with i20S	PEP10 cleaved with i20S
	N terminus			C terminus		
CPV01	PEP18	PEP17	PEP14	PEP12*		
CPV02	PEP11*	PEP15	PEP19	PEP16		
CPV03	PEP11*	PEP16	PEP15	PEP19		
CPV04	PEP11*	PEP19	PEP15	PEP16		
CPV05	PEP15	PEP11*	PEP16	PEP19		
CPV06	PEP14	PEP12*	PEP13	PEP17		
CPV07	PEP17	PEP14	PEP13	PEP12*		
CPV08	PEP17	PEP13	PEP18	PEP14		
CPV09	PEP13	PEP12*	PEP14	PEP18		
CPV10	PEP17	PEP12*	PEP14	PEP18		
CPV11	PEP17	PEP13	PEP12*	PEP14		
CPV12	PEP17	PEP18	PEP14	PEP12*		
CPV13	PEP17	PEP18	PEP14	PEP13		
CPV14	PEP7	PEP8*	PEP1	PEP2*	○	
CPV15	PEP7	PEP8*	PEP13	PEP2*	*	
CPV16	PEP2*	PEP9*	PEP4	PEP5	*	

p>0.05	
p<0.05, $10 \leq \Delta < 100$	
p<0.05, $100 \leq \Delta < 200$	
p<0.05, $200 \leq \Delta$	

Uncleavable	
Cleavable	○
Unexamined	*

Fig. 3-4

	Epitope specific CTL induction				PEP2 cleaved with i20S	PEP10 cleaved with i20S
Conjugate administered	N terminus		C terminus			
TPV39	PEP7	PEP13	PEP8*	PEP2*	○	
TPV40	PEP7	PEP13	PEP8*	PEP2*	○	
TPV41	PEP7	PEP13	PEP8*	PEP2*		
TPV42	PEP5	PEP9*	PEP6	PEP4		
TPV43	PEP5	PEP9*	PEP6	PEP4		
TPV44	PEP15	PEP18	PEP1	PEP10*		
TPV45	PEP15	PEP18	PEP1	PEP10*		

p>0.05	
p<0.05, $10 \leq \Delta < 100$	
p<0.05, $100 \leq \Delta < 200$	
p<0.05, $200 \leq \Delta$	

Uncleavable	
Cleavable	○
Unexamined	*

Fig. 4-1

	Epitope specific IgG (fold induction vs. IFA)			
mixture1	PEP10	PEP13	PEP15	PEP18
mixture2	PEP4	PEP5	PEP6	PEP9
mixture3	PEP1	PEP2	PEP7	PEP8
mixture4	PEP1	PEP10	PEP15	PEP18
Conjugate administered	N terminus		C terminus	
TPV01	PEP5	PEP6	PEP9	PEP4
TPV02	PEP9	PEP5	PEP6	PEP4
TPV03	PEP6	PEP5	PEP9	PEP4
TPV04	PEP6	PEP9	PEP5	PEP4
TPV05	PEP9	PEP6	PEP5	PEP4
TPV06	PEP5	PEP9	PEP6	PEP4
TPV07	PEP1	PEP7	PEP8	PEP2
TPV08	PEP1	PEP8	PEP7	PEP2
TPV09	PEP7	PEP1	PEP8	PEP2
TPV10	PEP8	PEP7	PEP1	PEP2
TPV11	PEP8	PEP1	PEP7	PEP2
TPV12	PEP7	PEP13	PEP8	PEP2
TPV13	PEP8	PEP13	PEP7	PEP2
TPV14	PEP13	PEP7	PEP8	PEP2
TPV15	PEP8	PEP7	PEP13	PEP2
TPV16	PEP13	PEP8	PEP7	PEP2
TPV17	PEP13	PEP15	PEP18	PEP10
TPV18	PEP13	PEP18	PEP15	PEP10
TPV19	PEP15	PEP13	PEP18	PEP10

Fig. 4-2

Conjugate administered	N terminus			C terminus
TPV20	PEP15	PEP18	PEP13	PEP10
TPV21	PEP18	PEP13	PEP15	PEP10
TPV22	PEP18	PEP15	PEP13	PEP10
TPV23	PEP1	PEP15	PEP18	PEP10
TPV24	PEP1	PEP18	PEP15	PEP10
TPV25	PEP15	PEP1	PEP18	PEP10
TPV26	PEP15	PEP18	PEP1	PEP10
TPV27	PEP18	PEP1	PEP15	PEP10
TPV28	PEP18	PEP15	PEP1	PEP10
TPV29	PEP15	PEP17	PEP13	PEP10
TPV30	PEP15	PEP13	PEP17	PEP10
TPV31	PEP17	PEP15	PEP13	PEP10
TPV32	PEP17	PEP13	PEP15	PEP10
TPV33	PEP13	PEP17	PEP15	PEP10
TPV34	PEP13	PEP15	PEP17	PEP10
TPV37	PEP1	PEP7	PEP6	PEP5
TPV38	PEP7	PEP1	PEP6	PEP5

fold<2	
2<fold<10	
10<fold<100	
100<fold	

Fig. 4-3

	Epitope specific IgG (fold induction vs. IFA)			
Conjugate administered	N terminus		C terminus	
TPV39	PEP7	PEP13	PEP8	PEP2
TPV40	PEP7	PEP13	PEP8	PEP2
TPV41	PEP7	PEP13	PEP8	PEP2

fold<2	
2<fold<10	
10<fold<100	
100<fold	