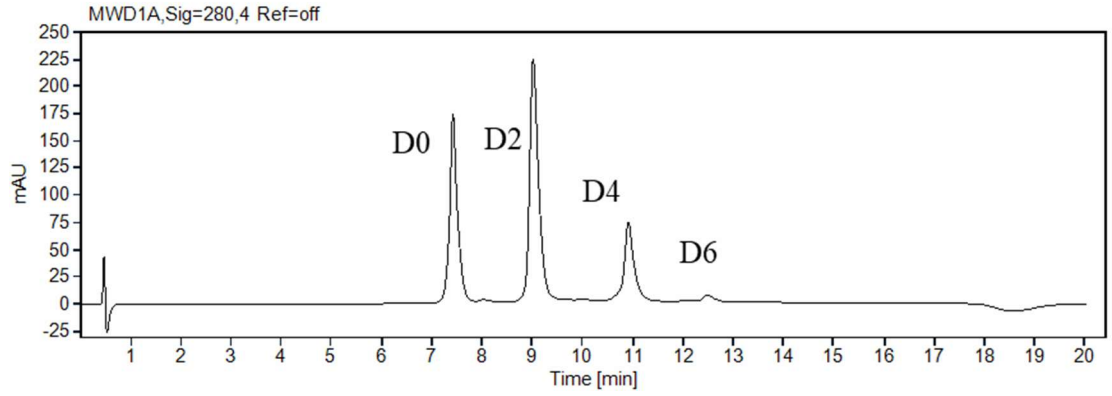
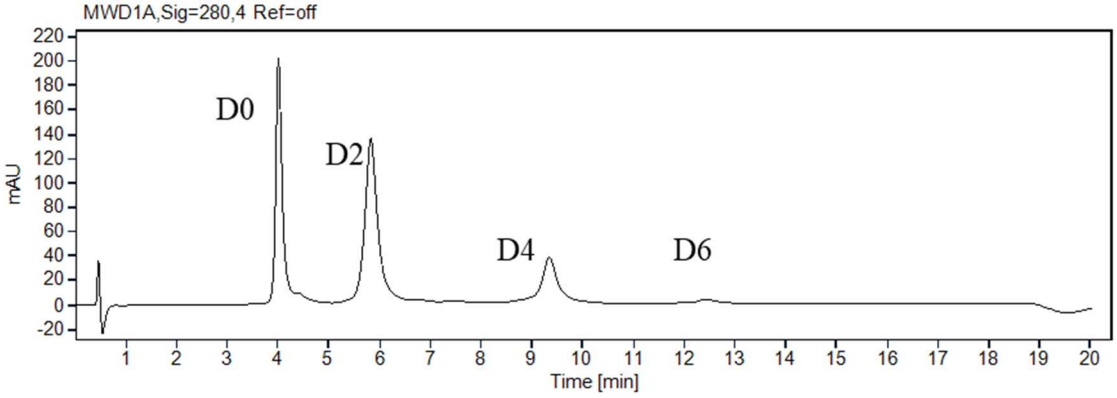
A **mAb1 Random-DAR2 conjugation（Mc-VC-MMAE）**



B **mAb2 Random-DAR2 conjugation（Mc-VC-MMAE）**



C **mAb3 Random-DAR2 conjugation（Mc-VC-MMAE）**

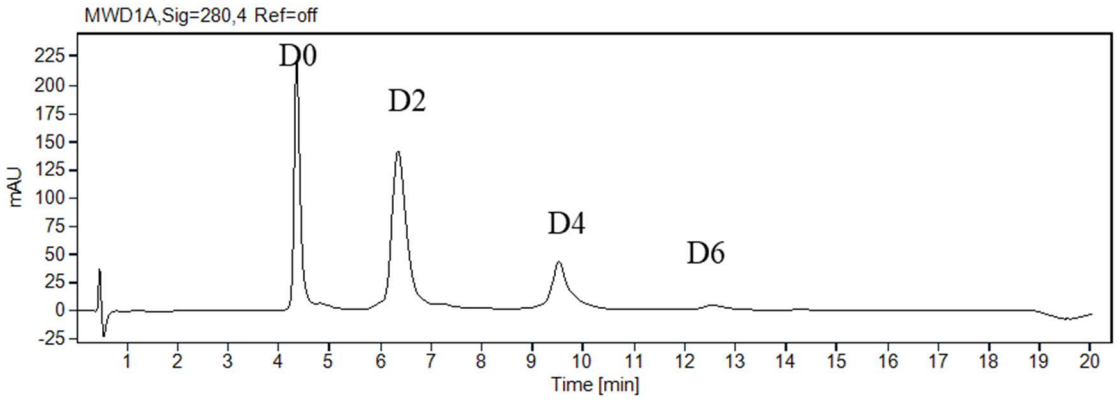
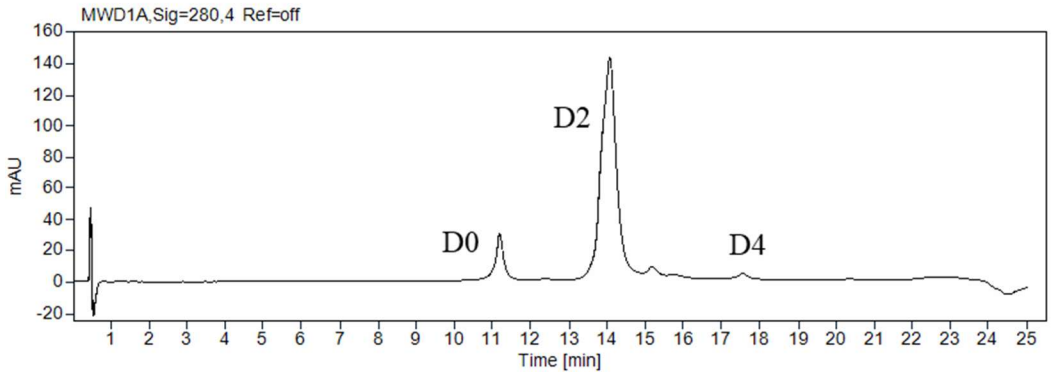
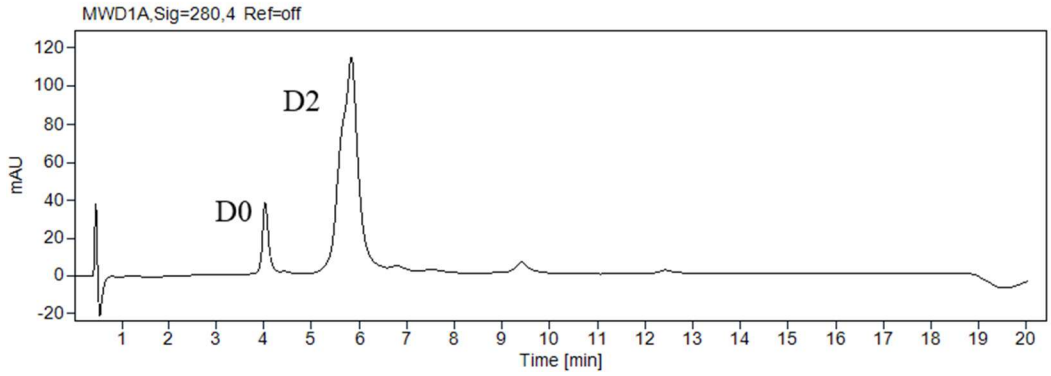


Fig. 1

A **mAb1 DAR2 conjugation（Mc-VC-MMAE）**



B **mAb2 DAR2 conjugation（Mc-VC-MMAE）**



C **mAb3 DAR2 conjugation（Mc-VC-MMAE）**

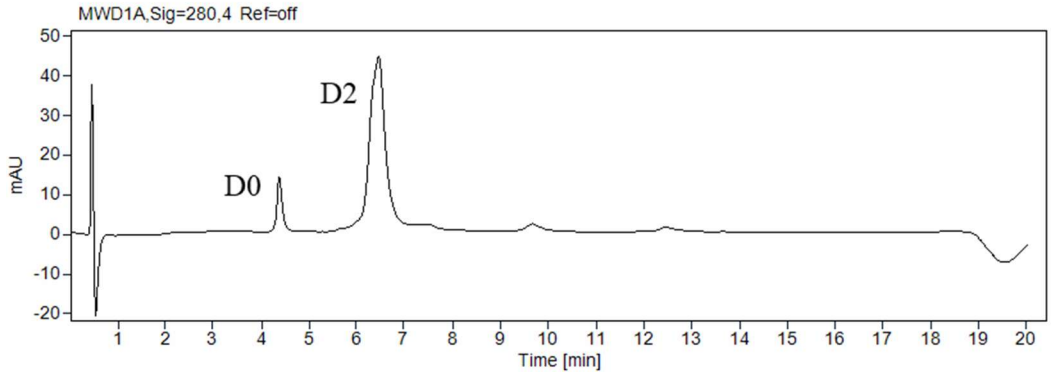
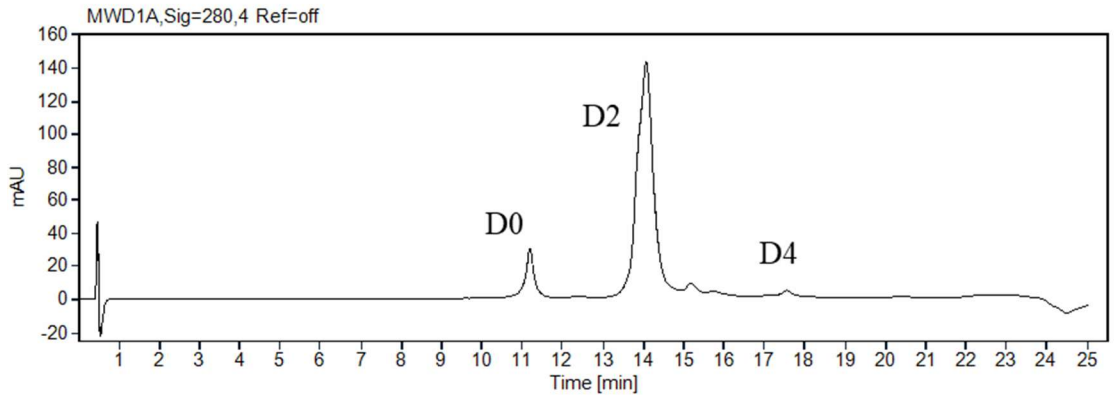
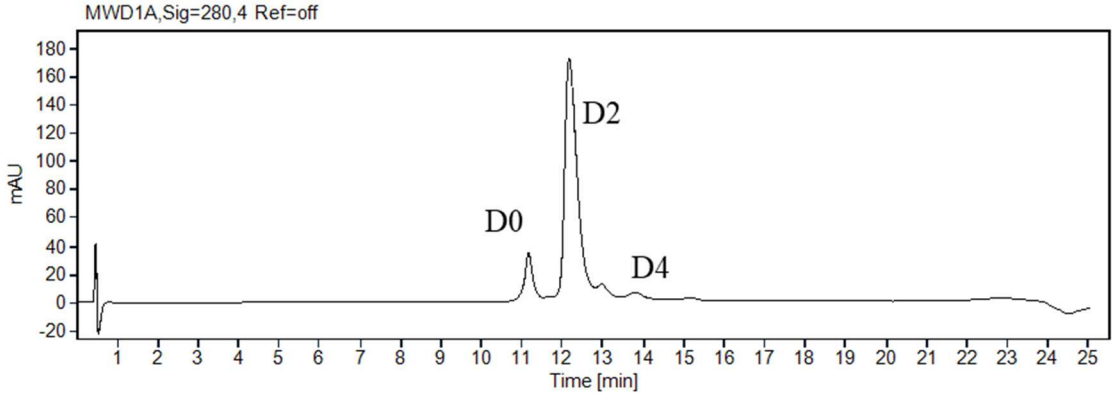


Fig. 2

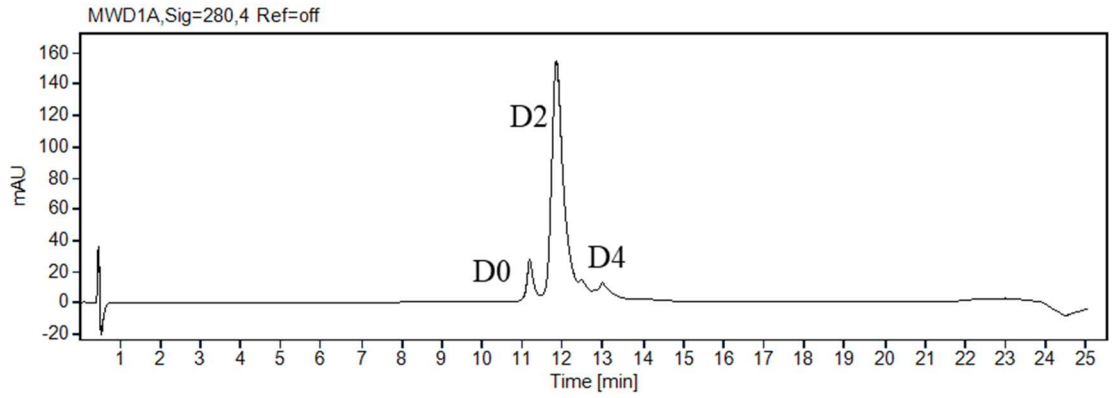
A **mAb1 DAR2 conjugation（Mc-VC-MMAE）**



B **mAb1 DAR2 conjugation（Mc-MMAF）**



C **mAb1 DAR2 conjugation（GGFG-Dxd）**



D **mAb1 DAR2 conjugation（PBD）**

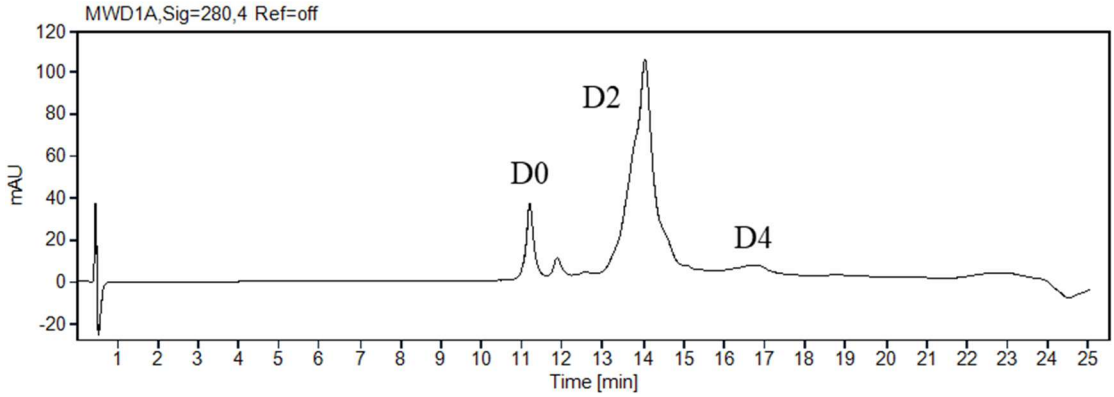
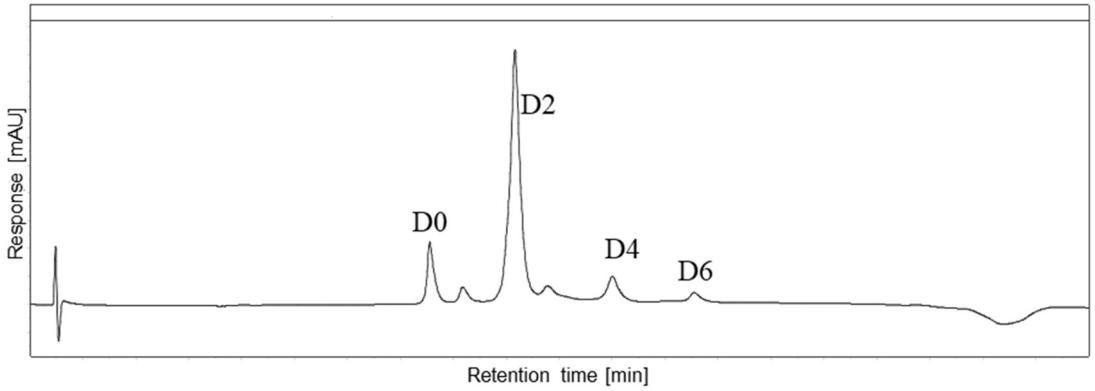


Fig. 3

E **mAb1 DAR2 conjugation（DL1-VC-PAB -MMAE）**



F **mAb1 DAR2 conjugation（DM21）**

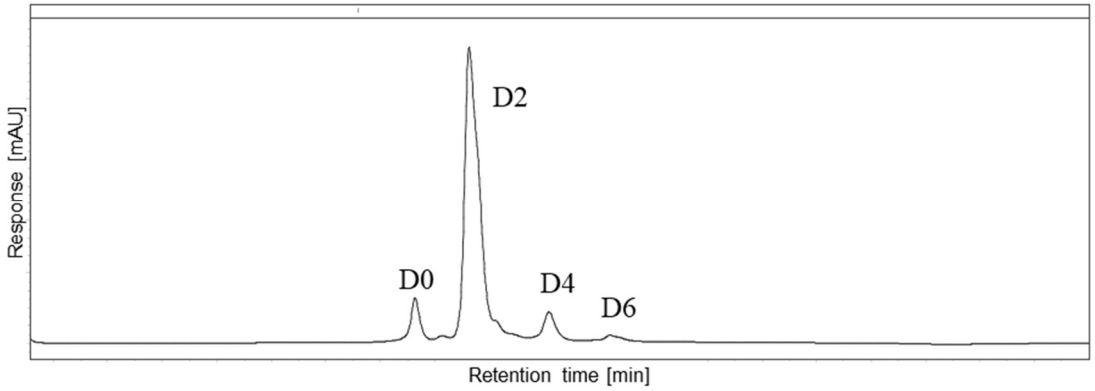
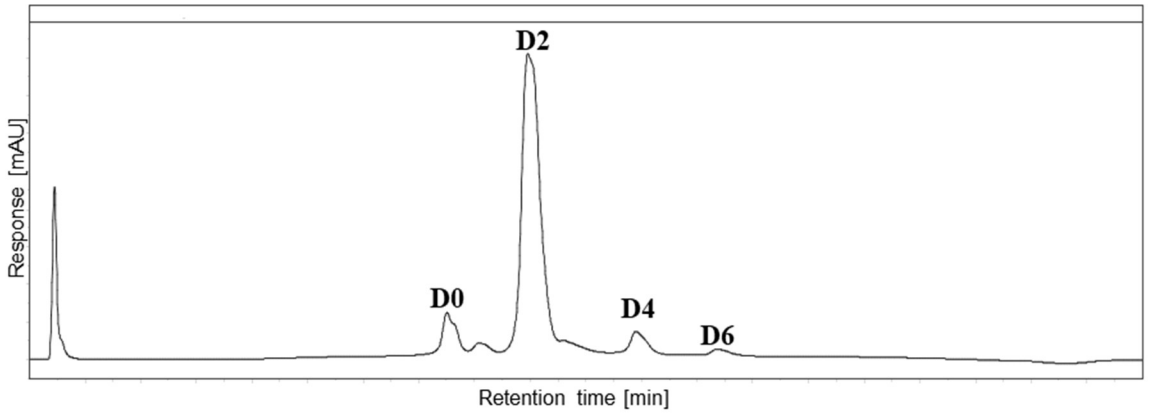
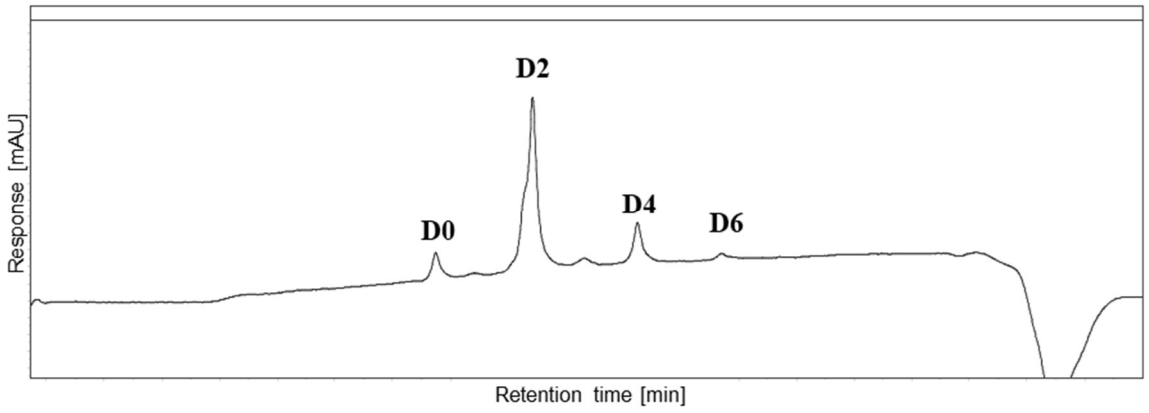


Fig. 3 (continued)

A **mAb1 3.25eq TCEP**



B **mAb1 35eq diPPBS1**



C **mAb1 10.00eq DPAA**

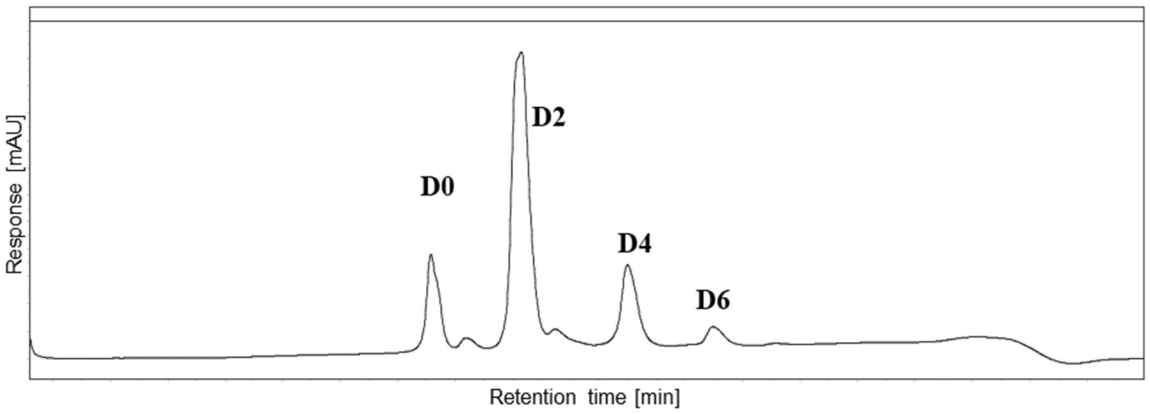
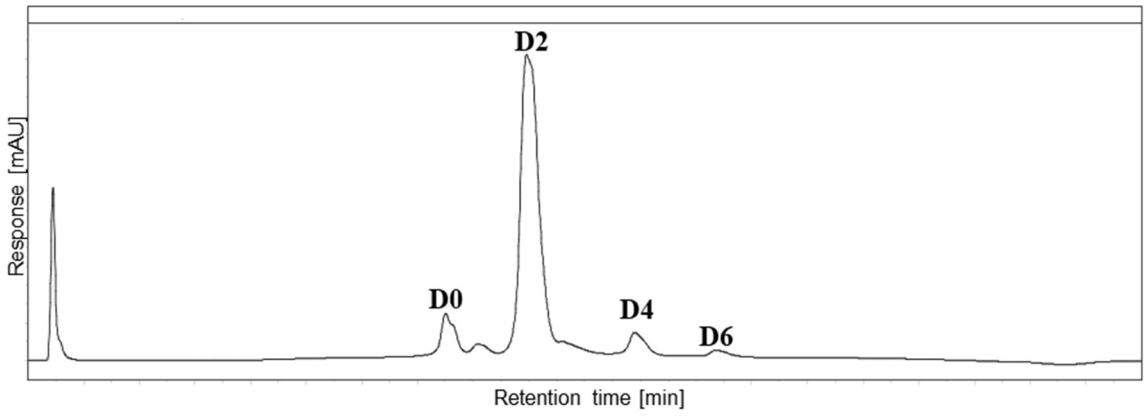
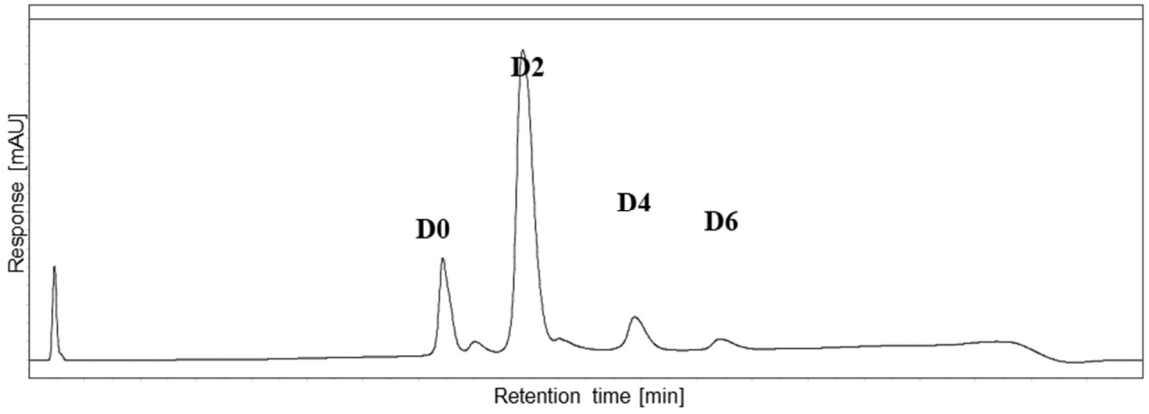


Fig. 4

D **mAb1 3.25eq TCEP**



E **mAb1 10eq TCEP**



F **mAb1 16eq TCEP**

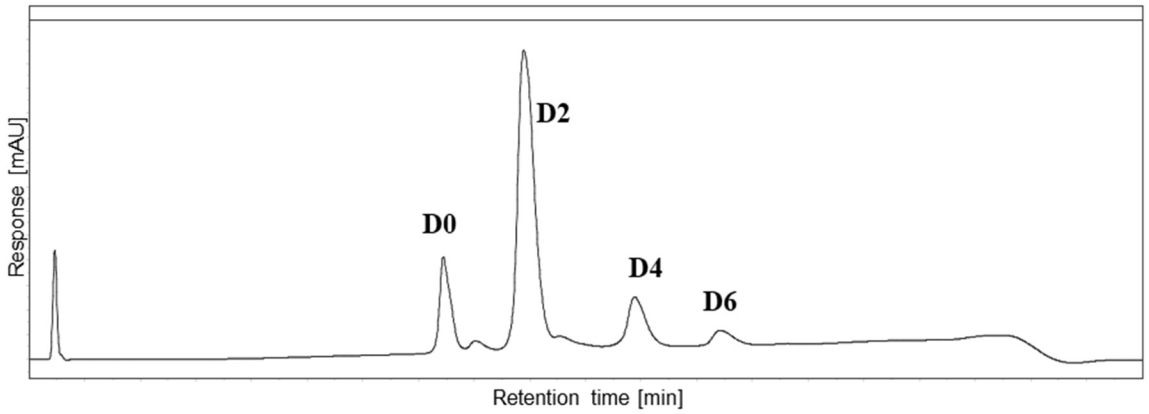
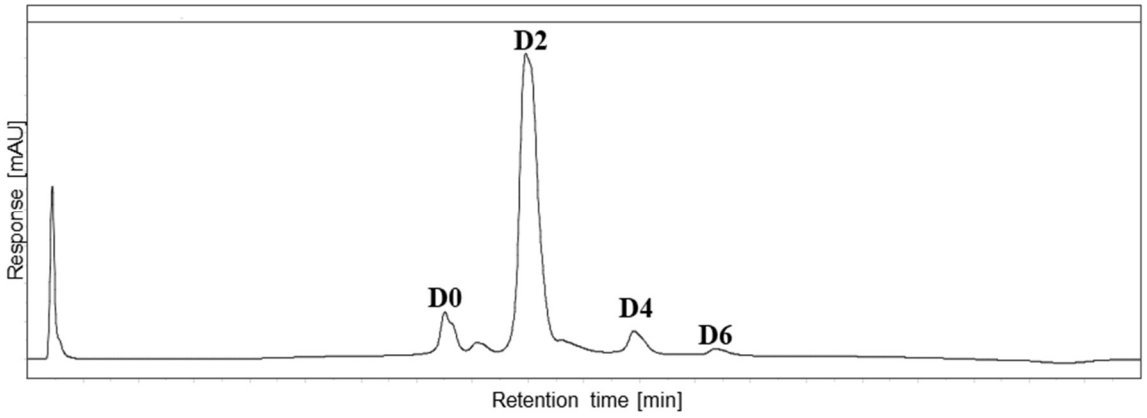
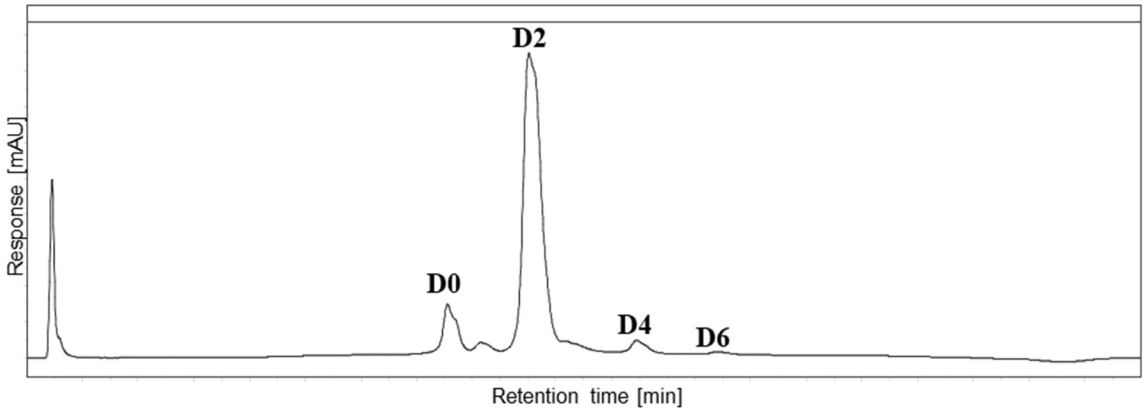


Fig. 4 (continued)

A **mAb1 HEPES**



B **mAb1 MES**



C **mAb1 Tris**

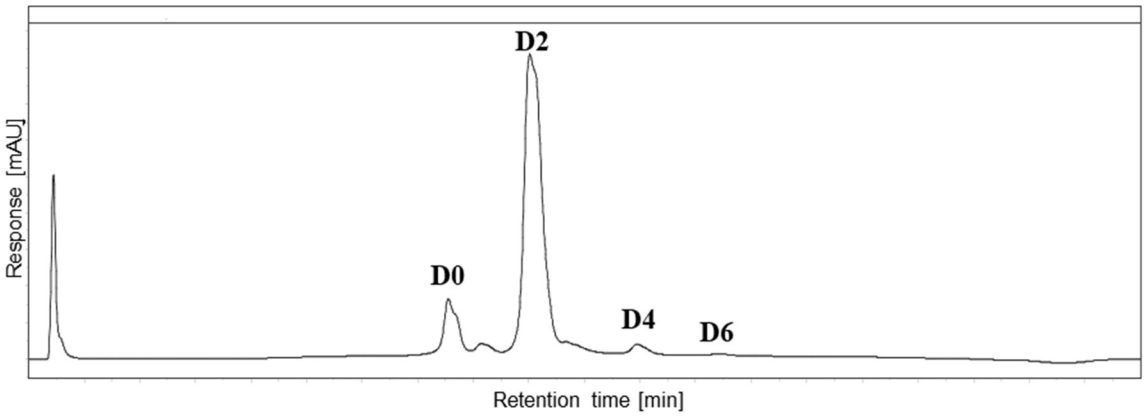
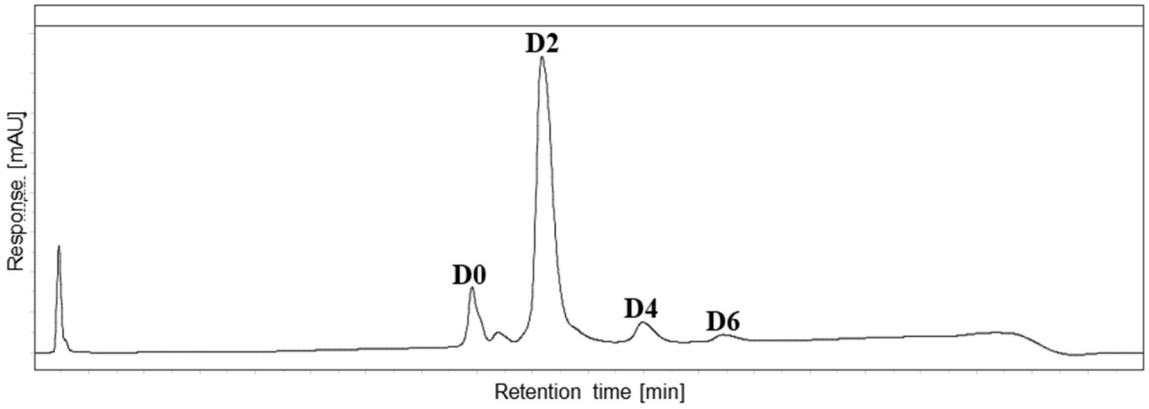
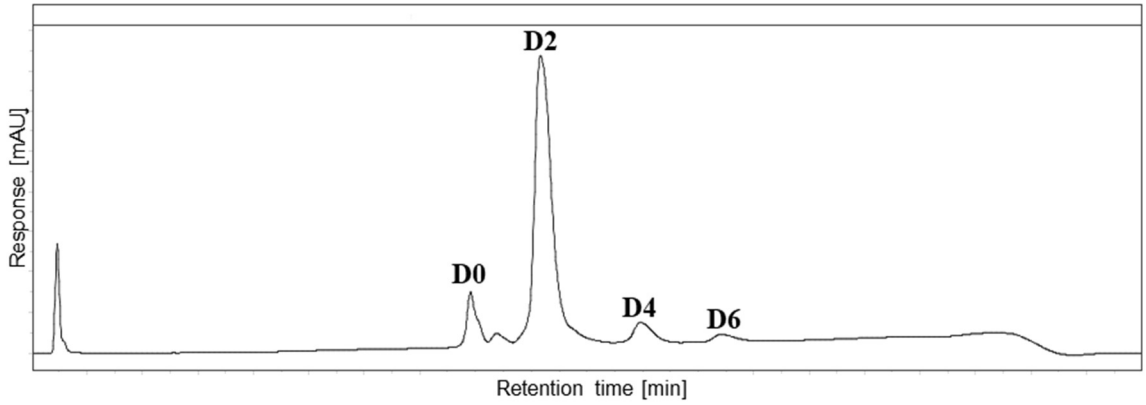


Fig. 5

A **mAb3 HEPES**



B **mAb3 MES**



C **mAb3 Tris**

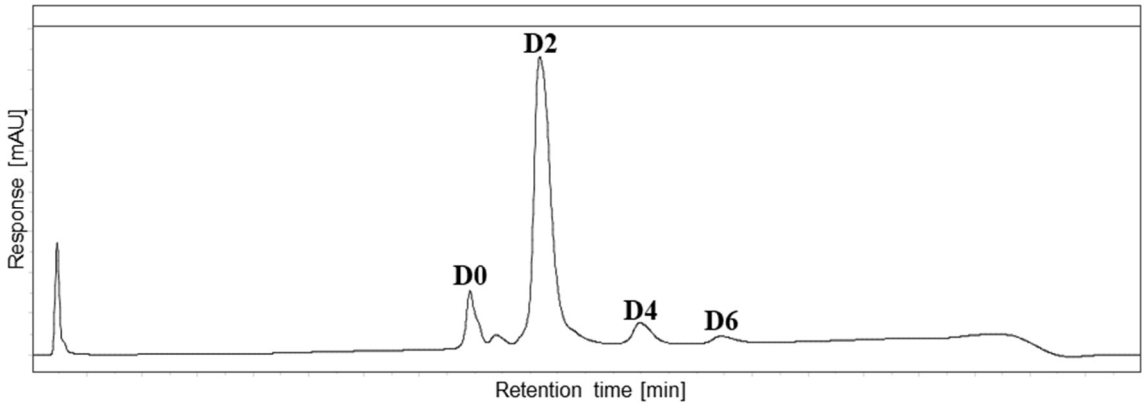
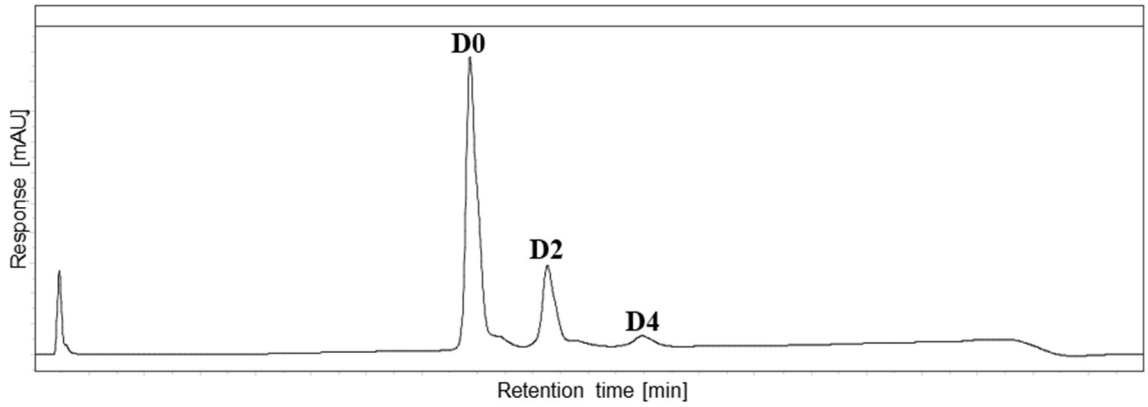
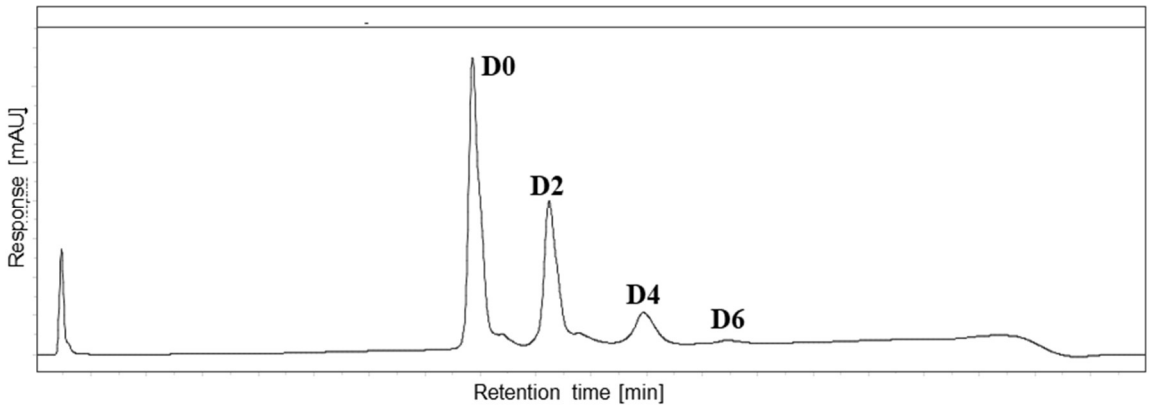


Fig. 6

A **mAb3 0Zn^{2+} HEPES**



B **mAb3 0Zn^{2+} MES**



C **mAb3 0Zn^{2+} Tris**

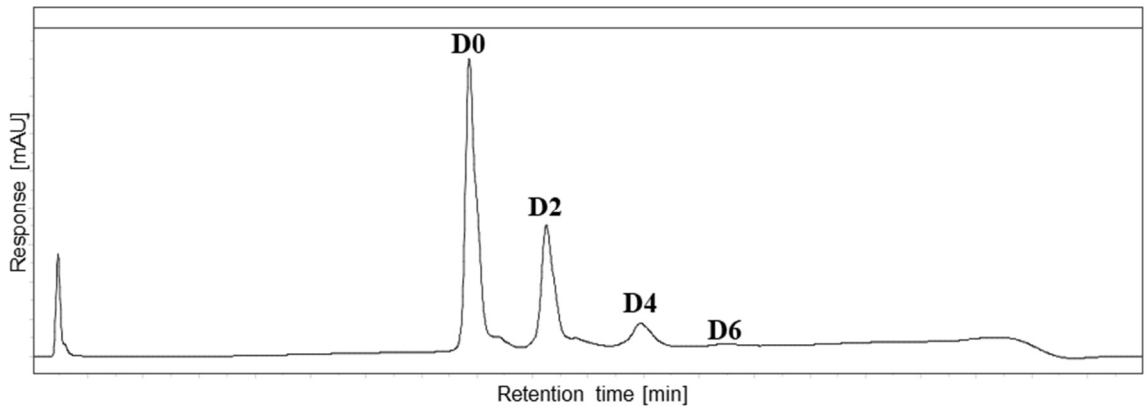


Fig. 7

mAb4（wuxibody) conjugation（Mc-VC-MMAE）

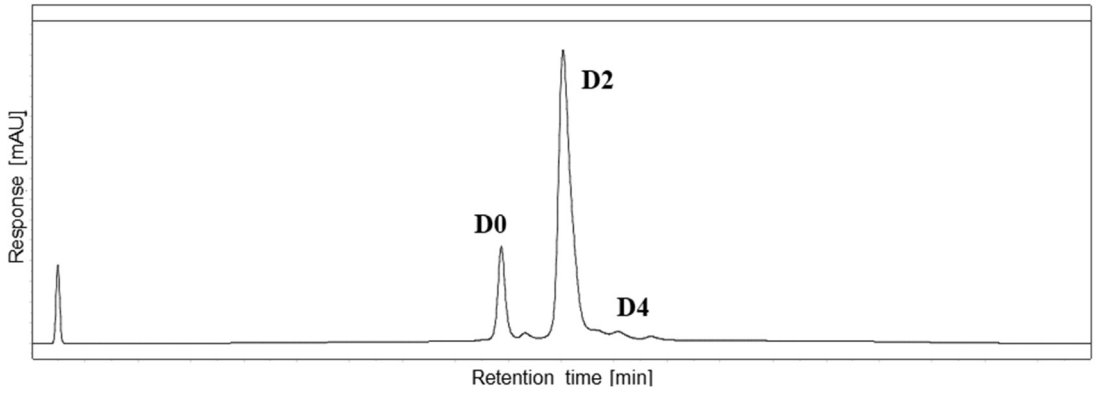
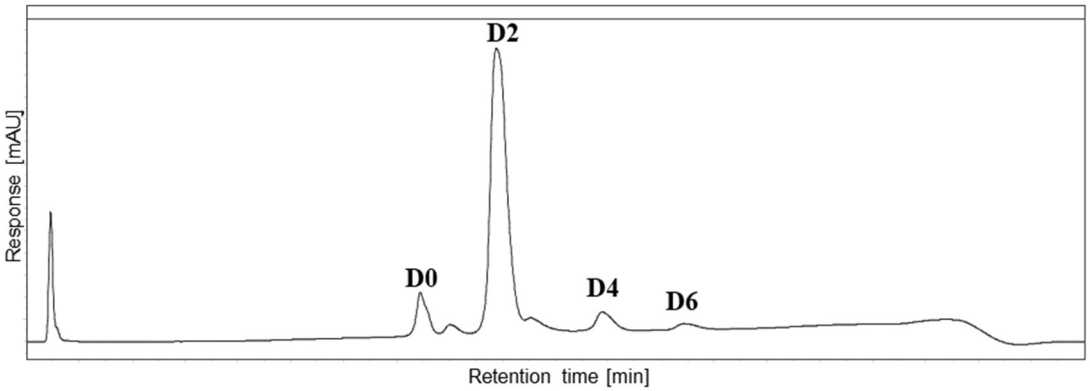
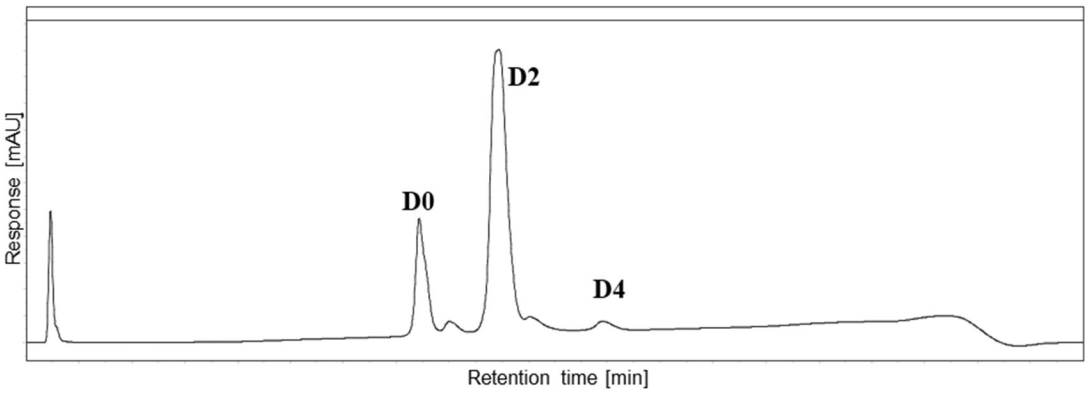


Fig. 8

A mAb1 4℃/19h



B mAb1 22℃/19h



C mAb1 37℃/2h

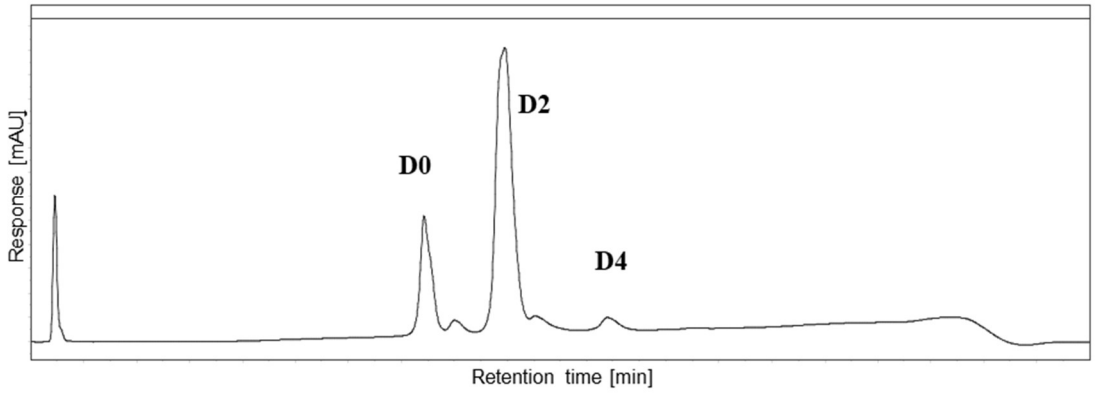
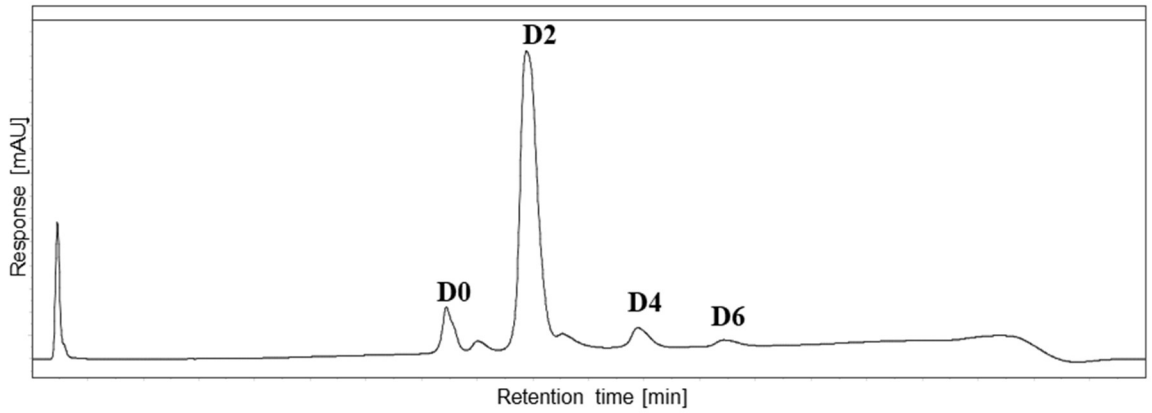
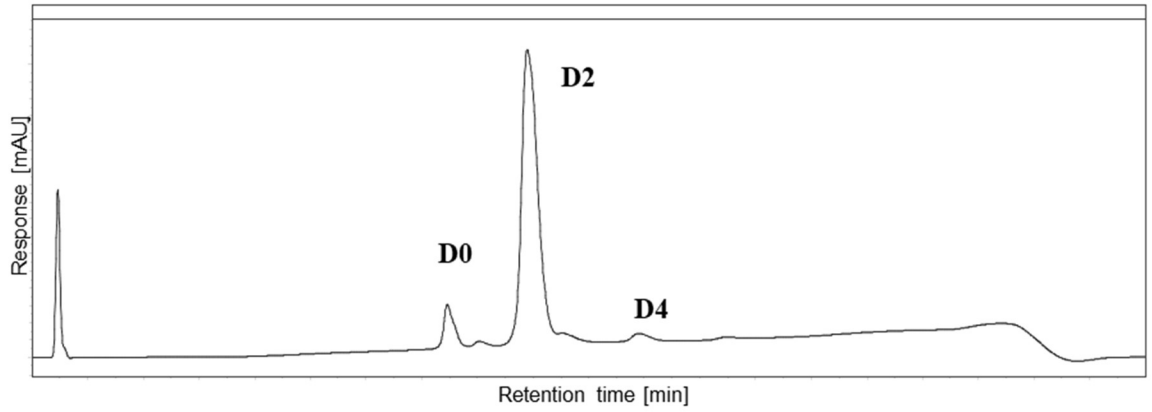


Fig. 9

D **mAb1 4°C/19h**



E **mAb1 4°C/45h**



F **mAb1 4°C/92h**

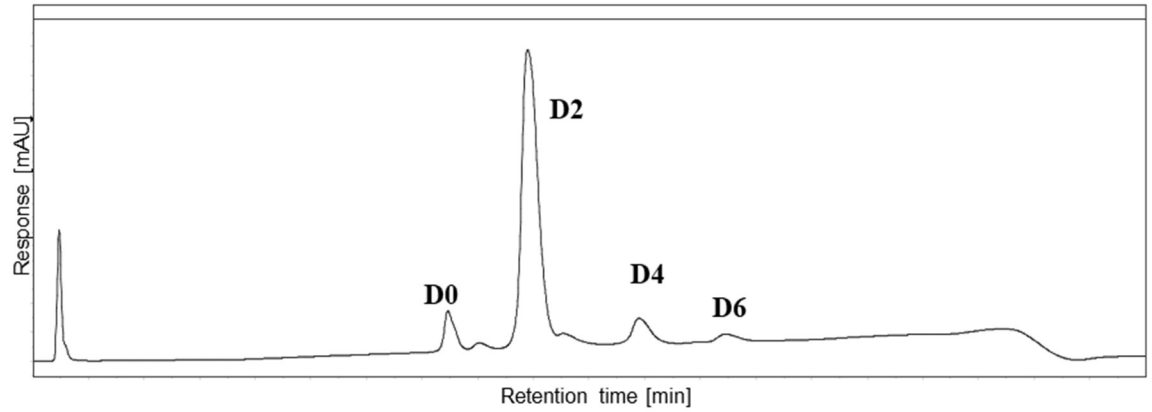
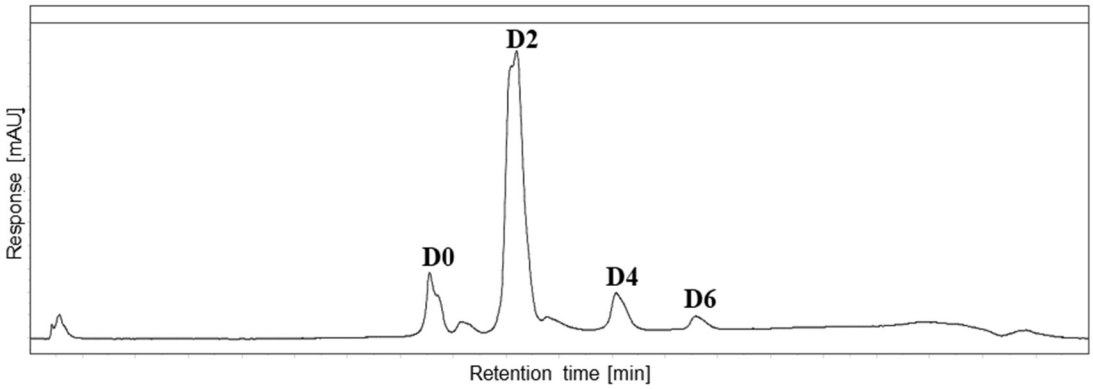
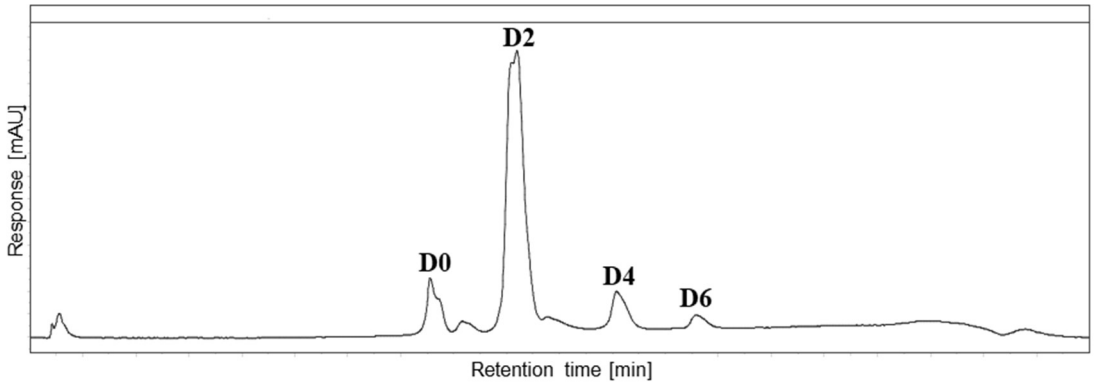


Fig. 9 (continued)

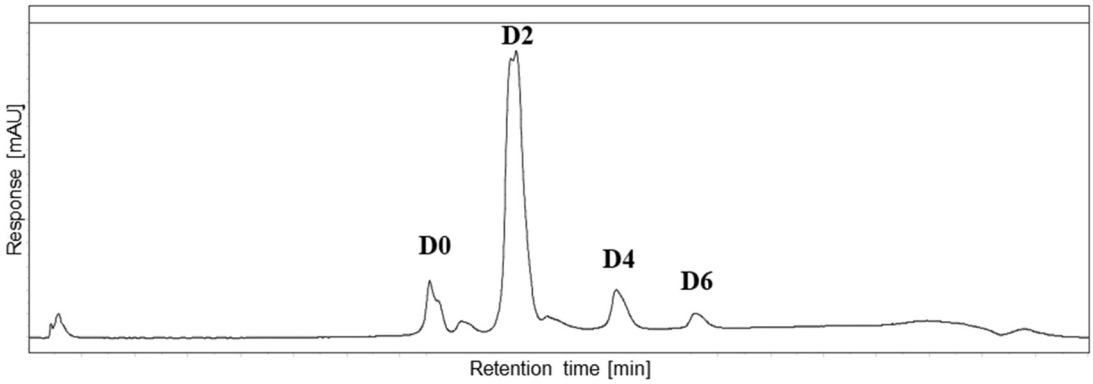
A **mAb1 $ZnSO_4 \cdot 7H_2O$**



B **mAb1 $ZnBr_2 \cdot 2H_2O$**



C **mAb1 $Zn(ClO_4)_2 \cdot 6H_2O$**



D **mAb1 $Zn(OAc)_2 \cdot 2H_2O$**

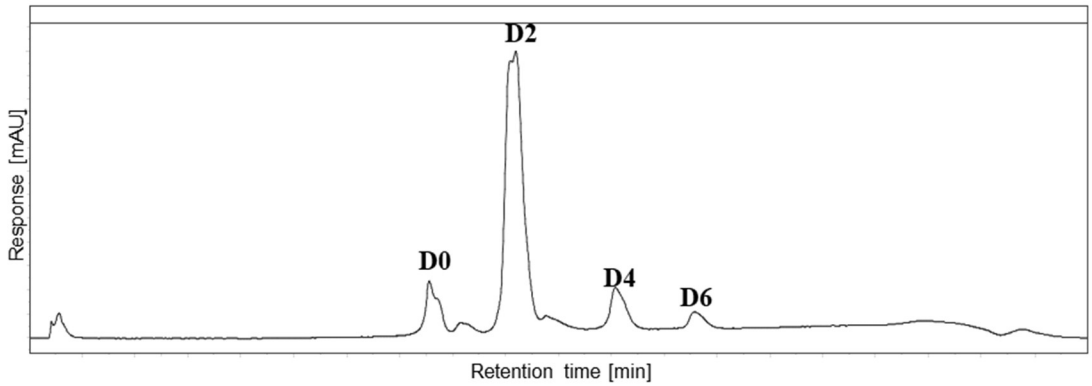
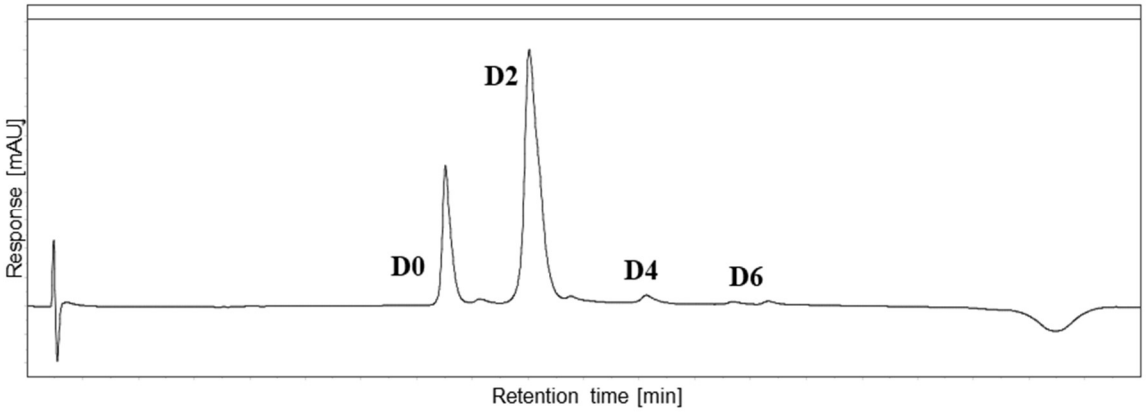
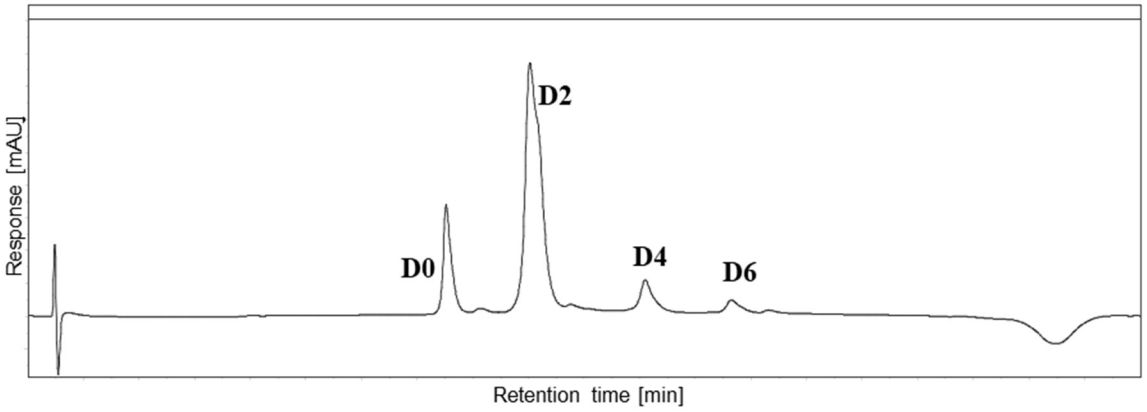


Fig. 10

A **mAb1 2eq Zn^{2+}**



B **mAb1 8eq Zn^{2+}**



C **mAb1 16eq Zn^{2+}**

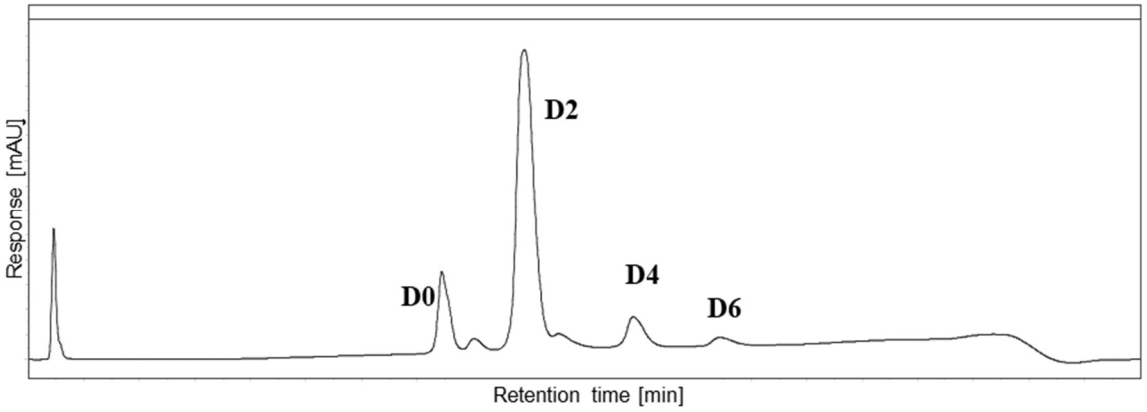


Fig. 11

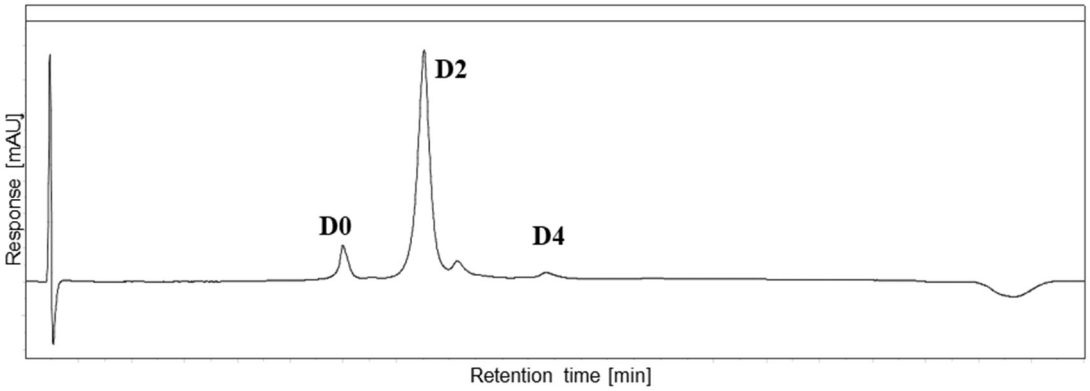
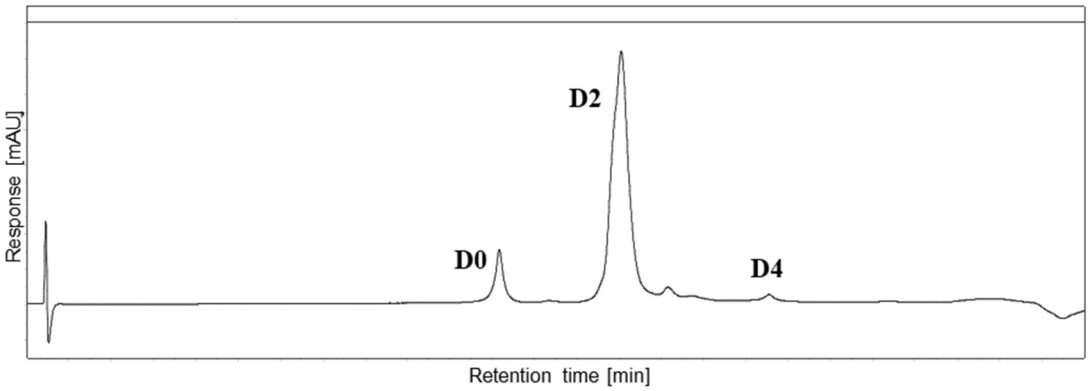
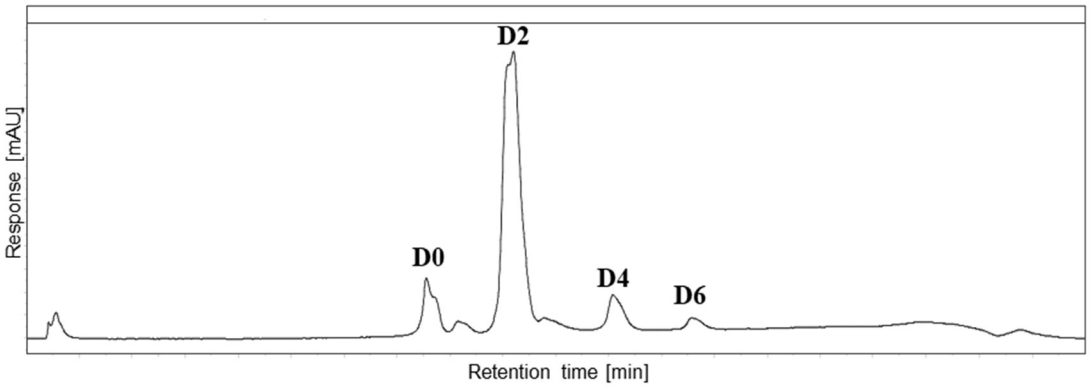


Fig. 12

A **mAb1 12eq DHAA**



B **mAb1 2.2eq DTNB**



C **mAb1 1.82eq DDD**

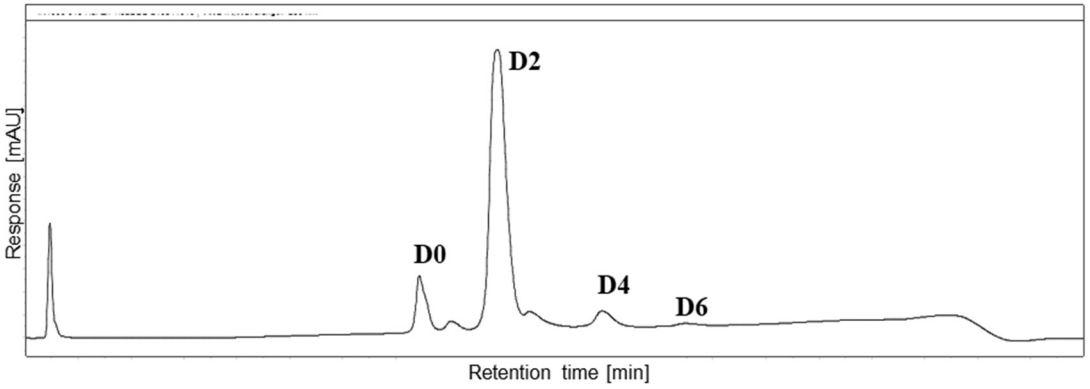
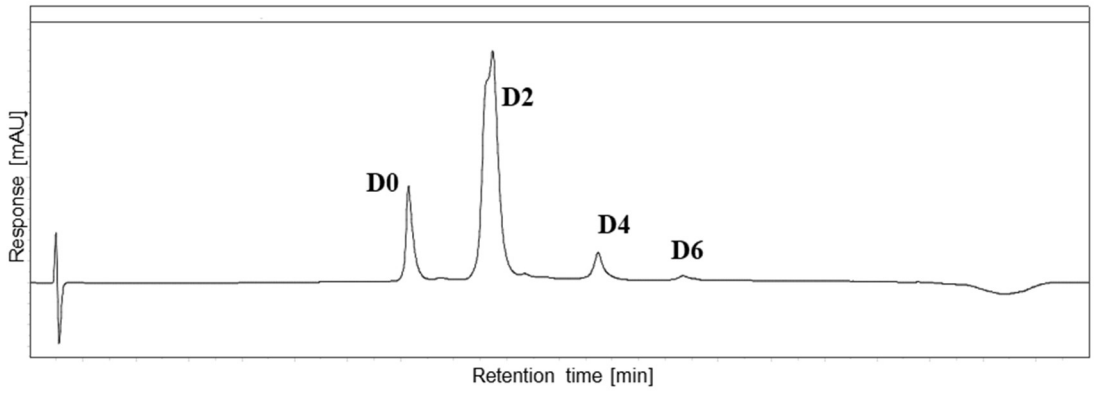
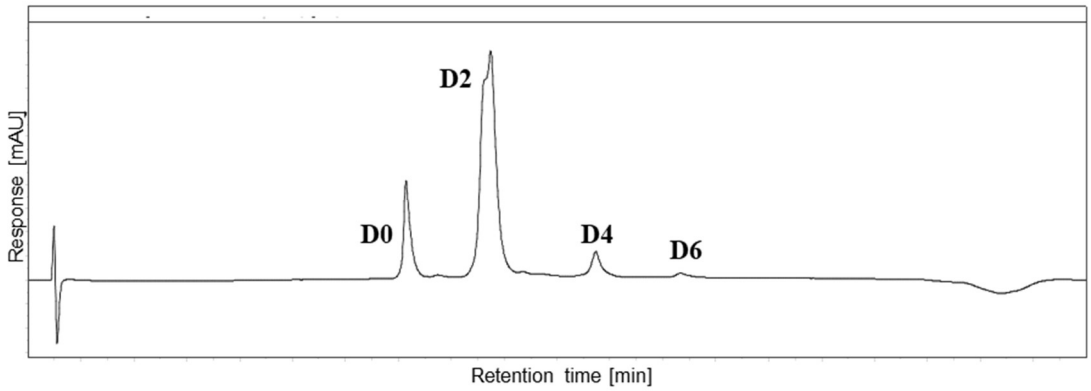


Fig. 13

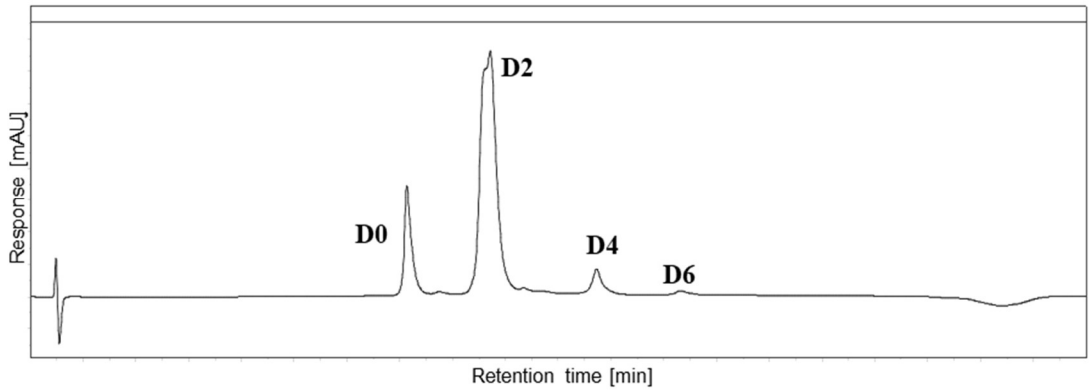
A **mAb1 oxidation 0℃**



B **mAb1 oxidation 12℃**



C **mAb1 oxidation 22℃**



D **mAb1 oxidation 37℃**

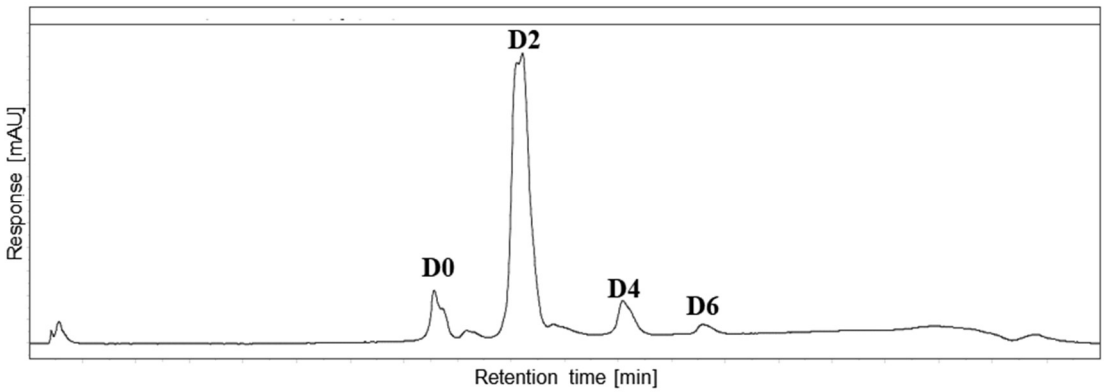
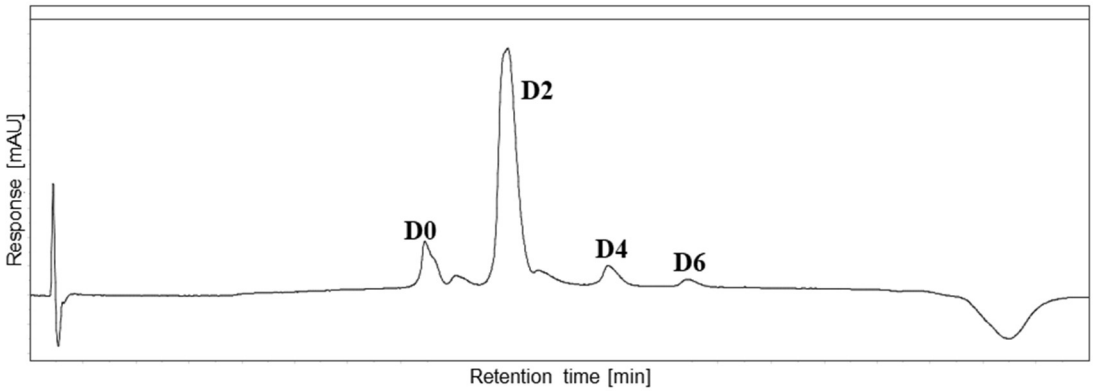
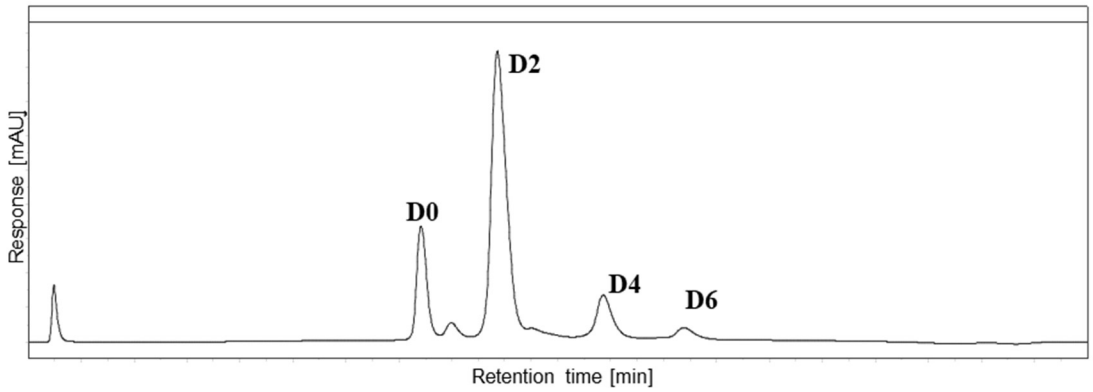


Fig. 14

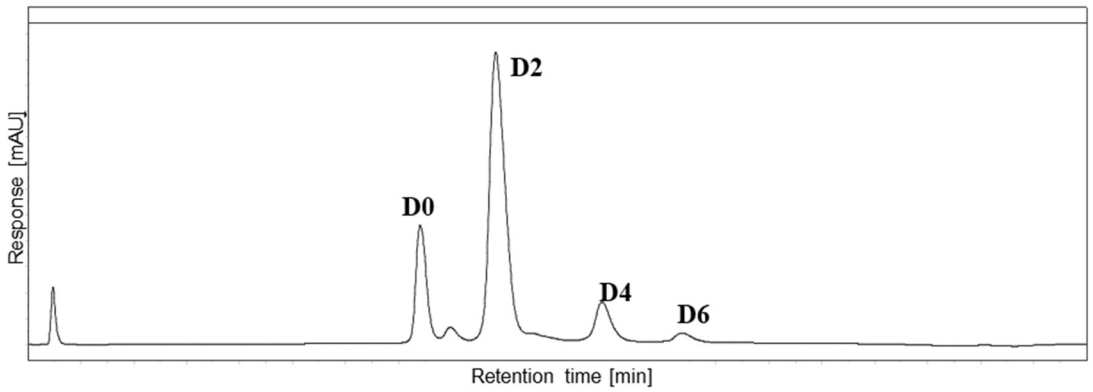
E **mAb1 re-oxidation at 12 °C for 0.5h**



F **mAb1 re-oxidation at 12 °C for 2h**



G **mAb1 re-oxidation at 12 °C for 4h**



H **mAb1 re-oxidation at 12 °C for 24h**

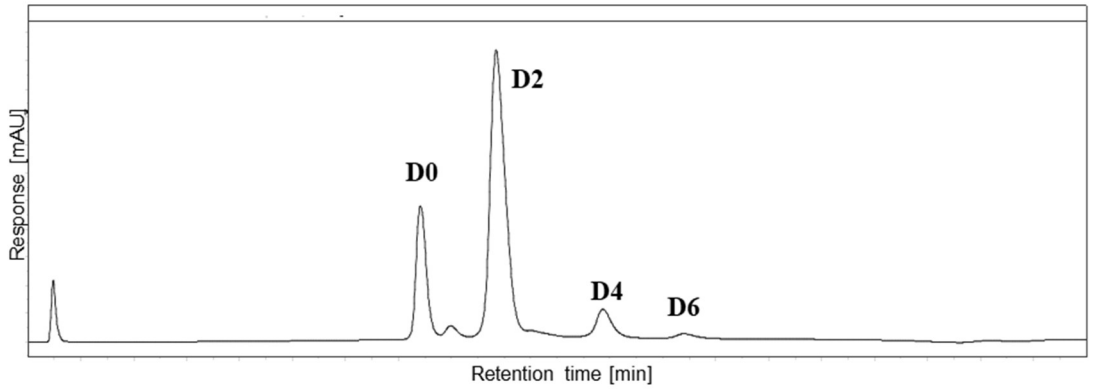
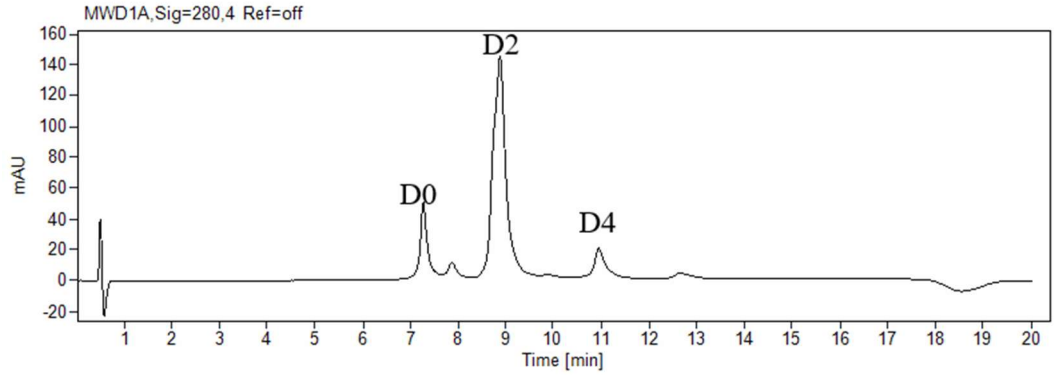


Fig. 14 (continued)

A **mAb1 conjugation at 0℃**



B **mAb1 conjugation at 12℃**

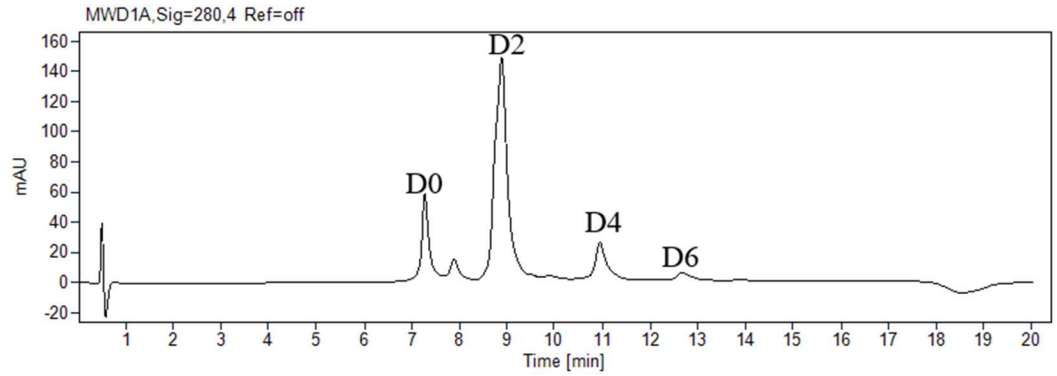


Fig. 15

mAb1 re-oxidation at 22℃ for 47.5h

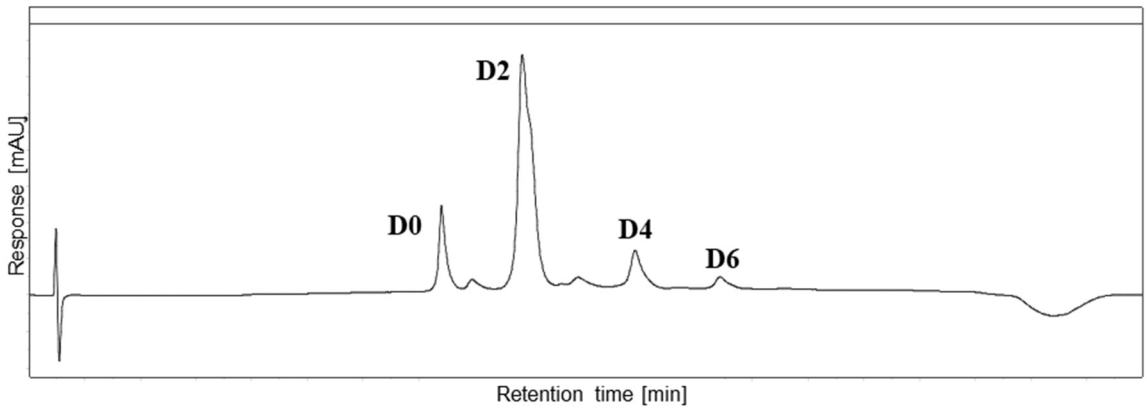
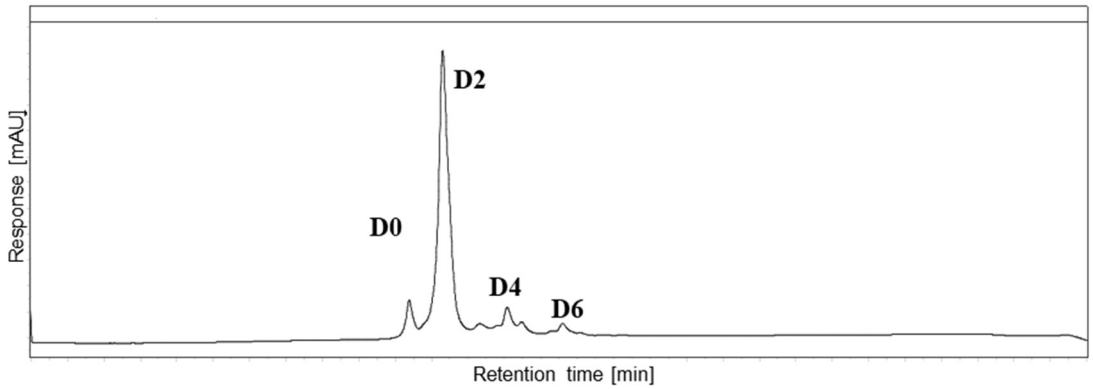
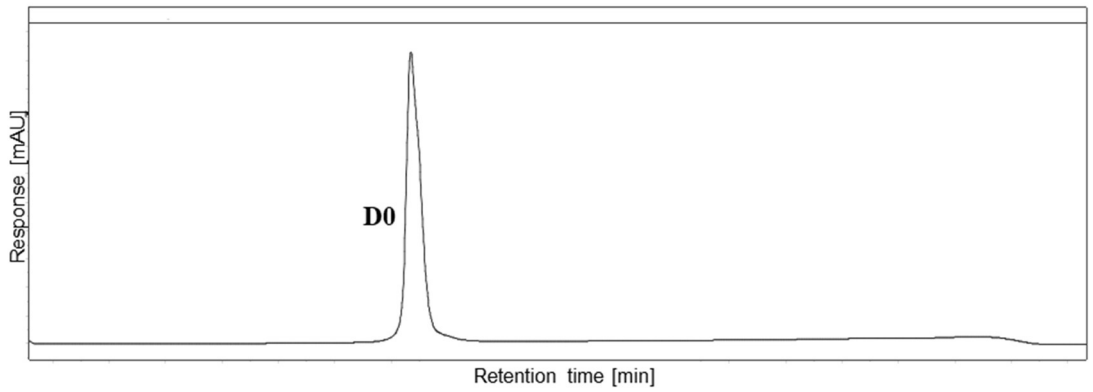


Fig. 16

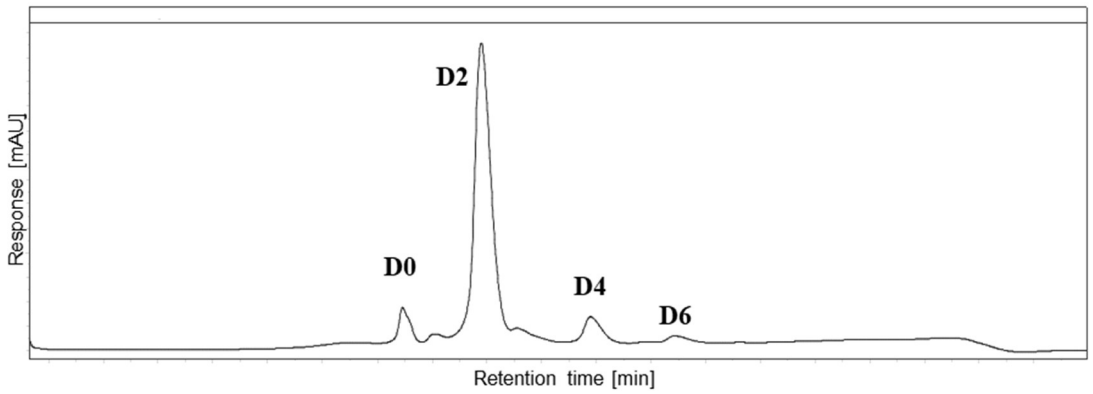
A **mAb1 re-oxidation PB/4Zn^{2+} 170h/12°C**



B **mAb1 re-oxidation PB/0Zn^{2+} 24h/12°C**



C **mAb1 re-oxidation HEPES+PB/4Zn^{2+} 170h/12°C**



D **mAb1 re-oxidation HEPES/0Zn^{2+} 24h/12°C**

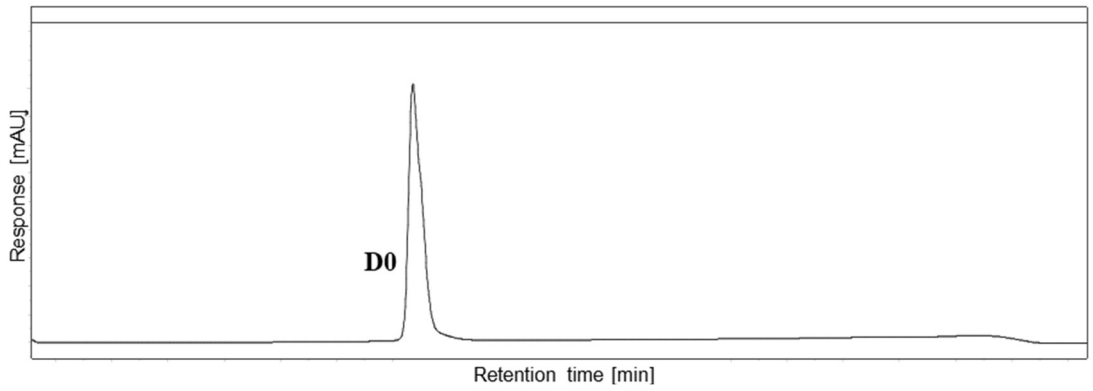
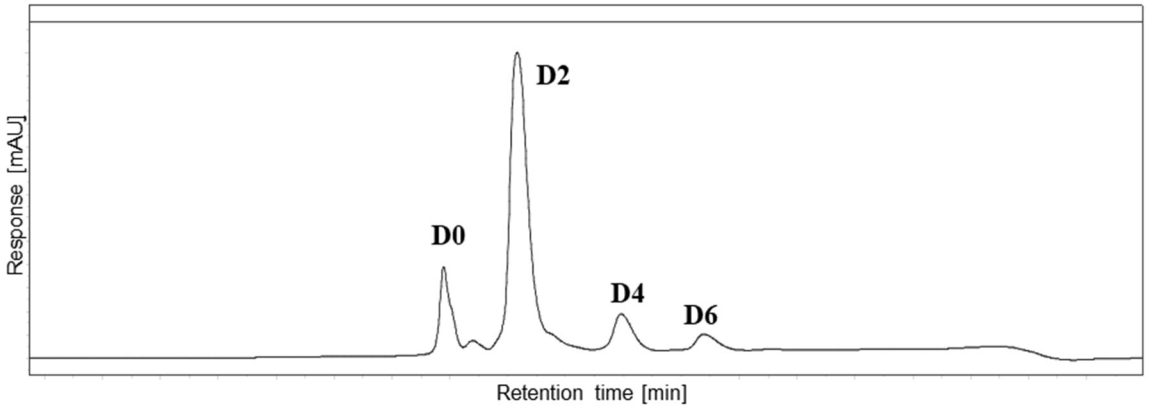


Fig. 17

A **mAb3 re-oxidation PB/4Zn^{2+} 170h/12°C**



B **mAb1 re-oxidation PB/0Zn^{2+} 24h/12°C**

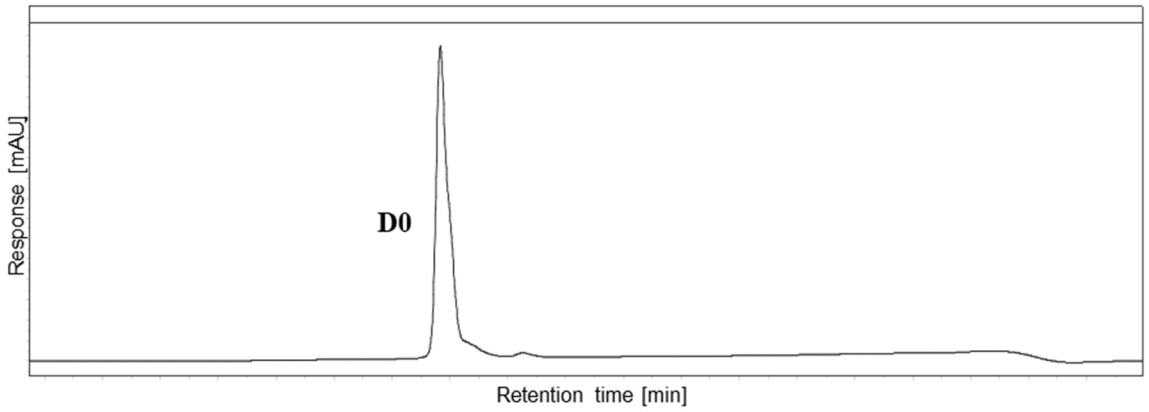
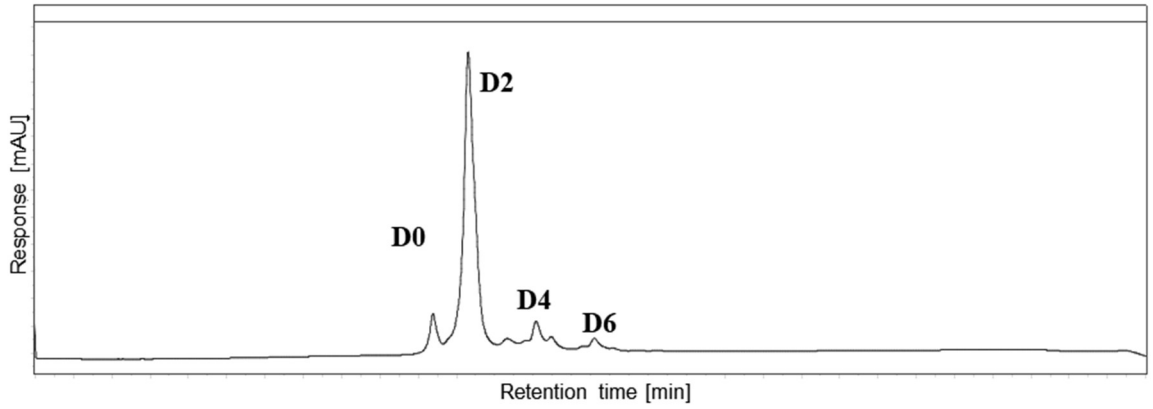
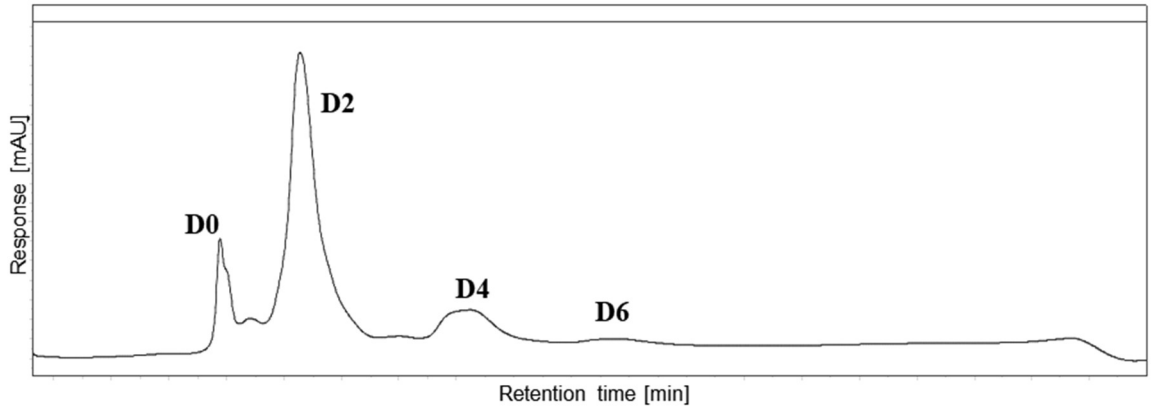


Fig. 18

A **mAb1 GGFG-Dxd PB/4Zn^{2+} 170H/12°C**



B **mAb1 PBD PB/4Zn^{2+} 170H/12°C**



C **mAb1 MC-VC-MMAE HEPES+PB/4Zn^{2+} 170H/12°C**

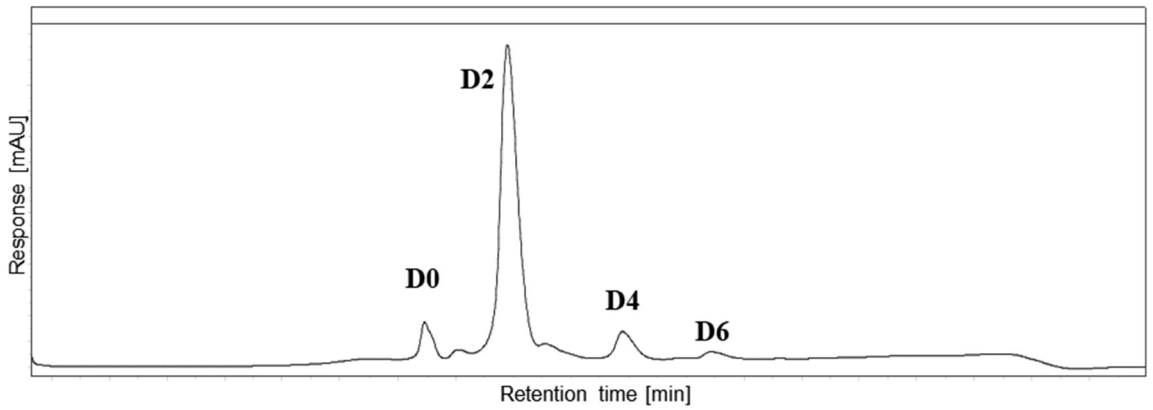
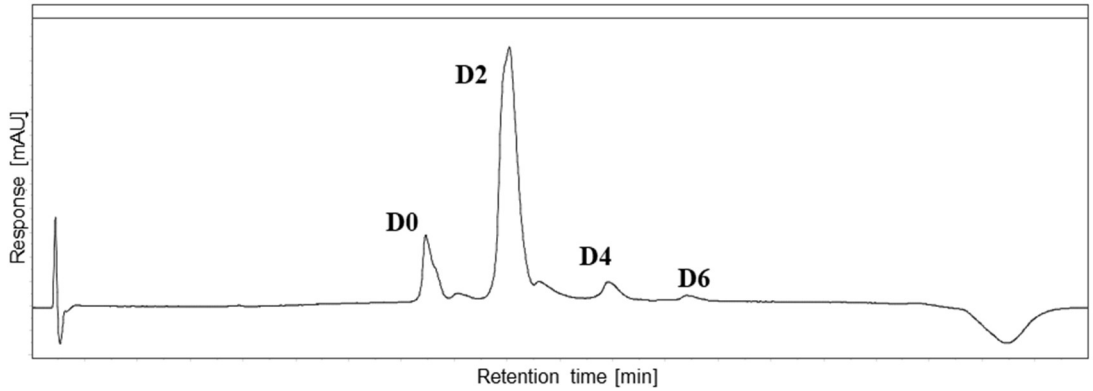


Fig. 19

A **mAb1 5mg/ml**



B **mAb1 10mg/ml**

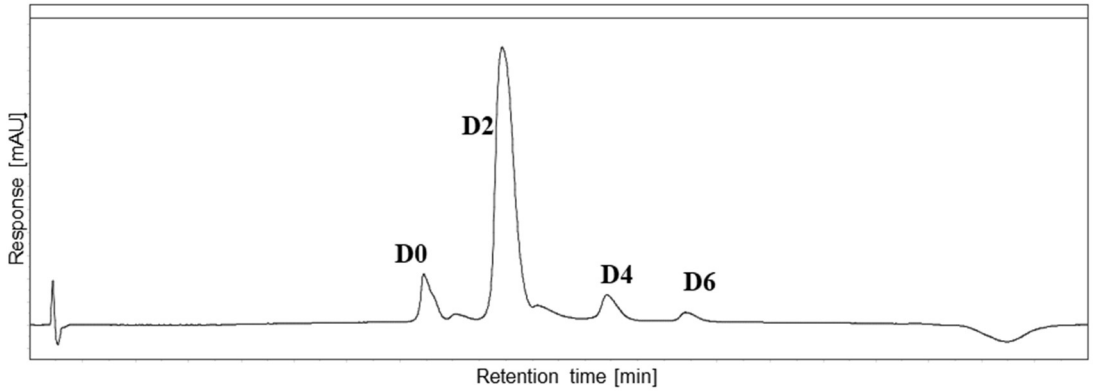
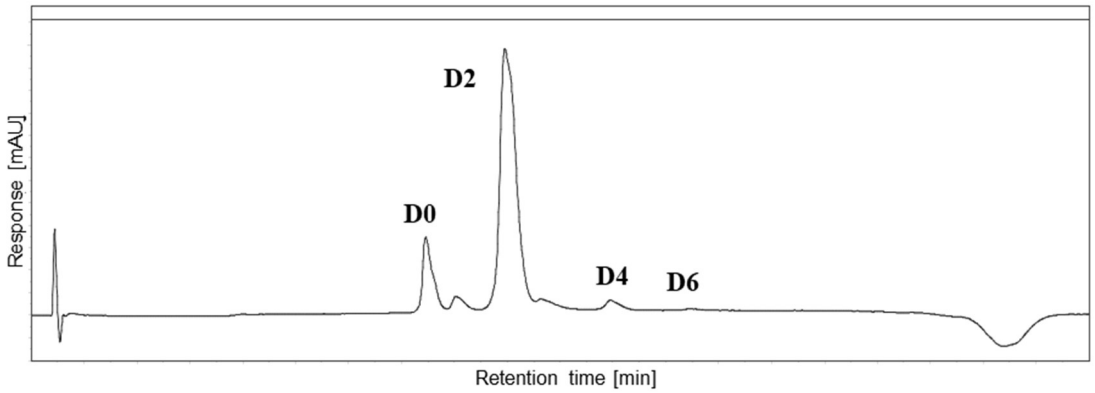


Fig. 20

A **mAb1 40mM HEPES**



B **mAb1 20mM HEPES**

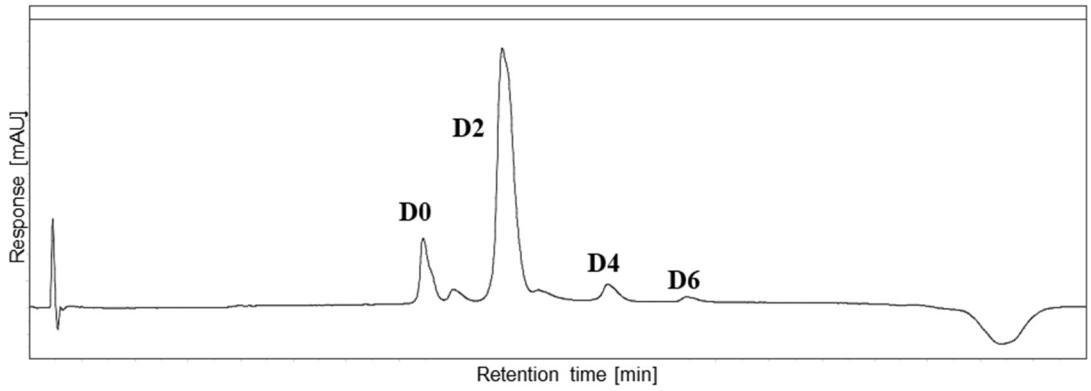


Fig. 21