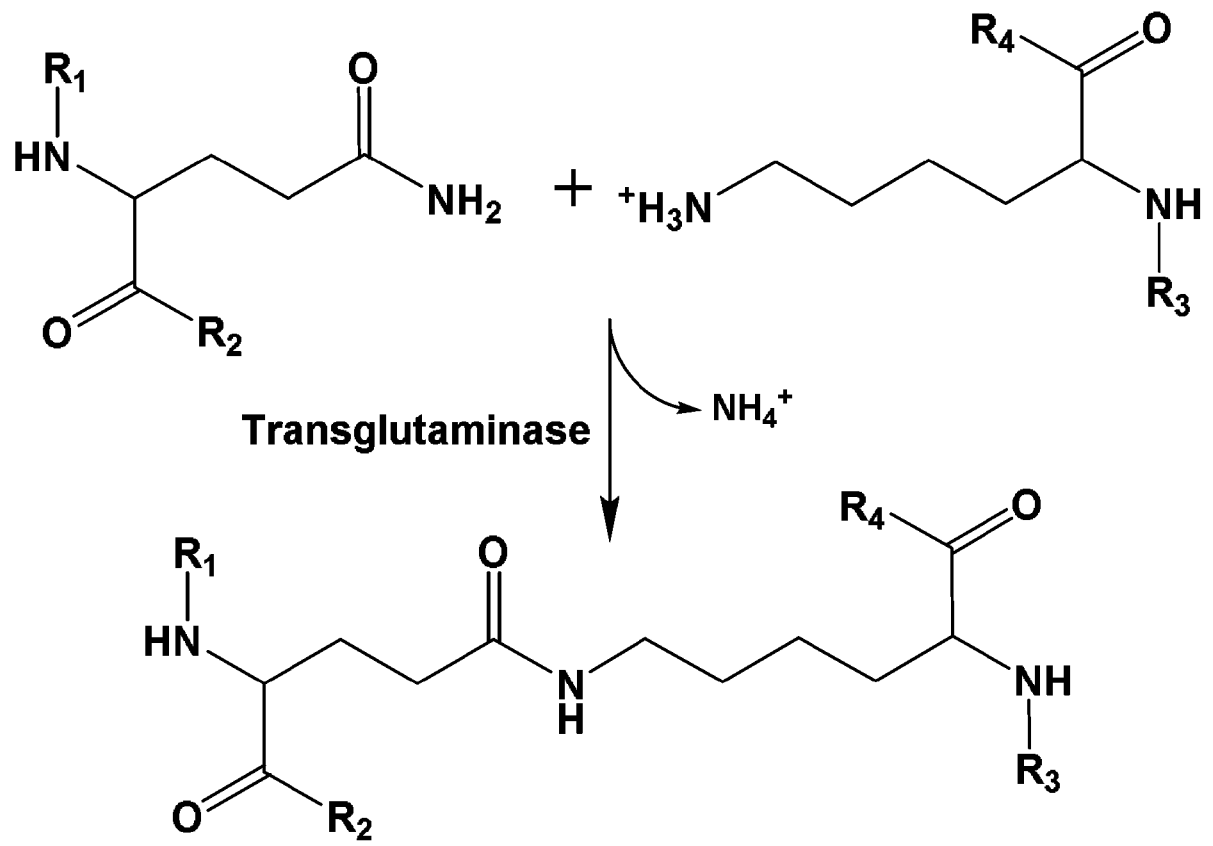


[Fig. 1]

FIGURE 1



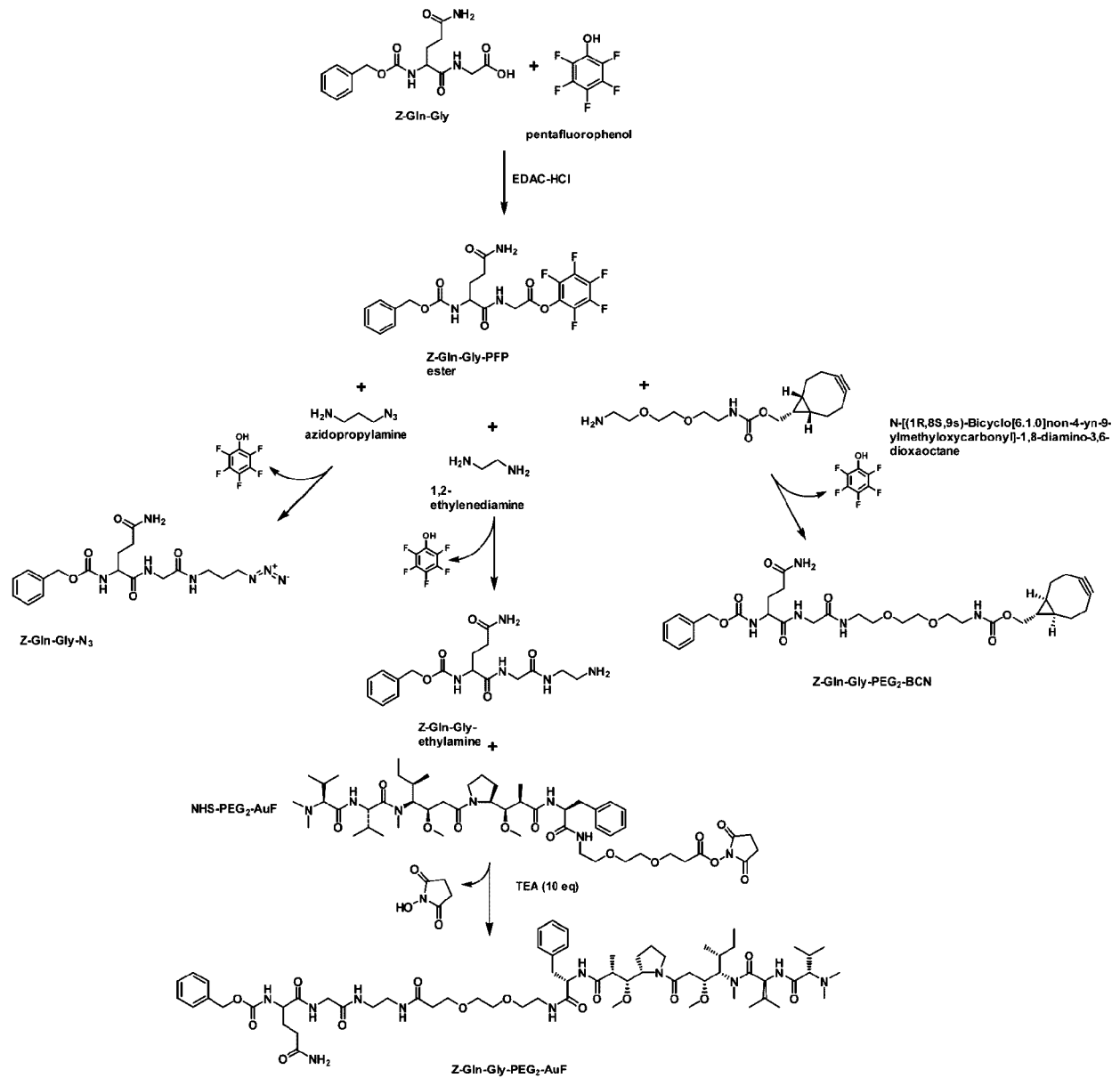
[Fig. 2]

FIGURE 2

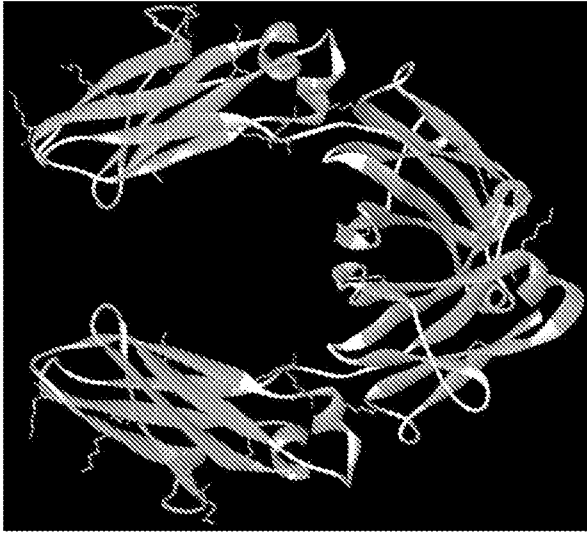
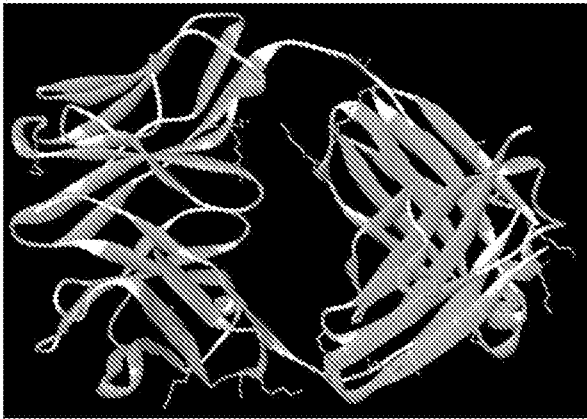
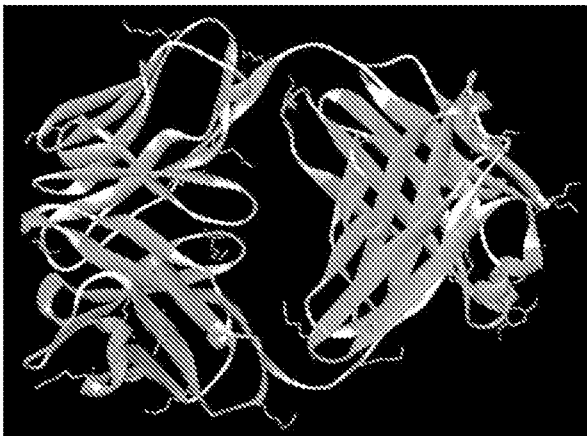
Z-Gln-Gly	
Z-Gln-Gly-CAD-Biotin	
Z-Gln-Gly-N ₃	
Z-Gln-Gly-PEG2-BCN	
Z-Gln-Gly-PEG2-Auristatin F	

[Fig. 3]

FIGURE 3



[Fig. 4]

FIG. 4C. Fc**FIG. 4B. Fab-lambda****FIG. 4A. Fab-kappa**

[Fig. 5]

FIG. 5B. Antibody 03

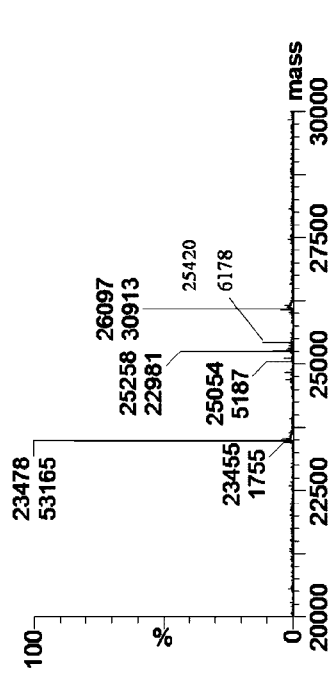


FIG. 5D. Antibody 04

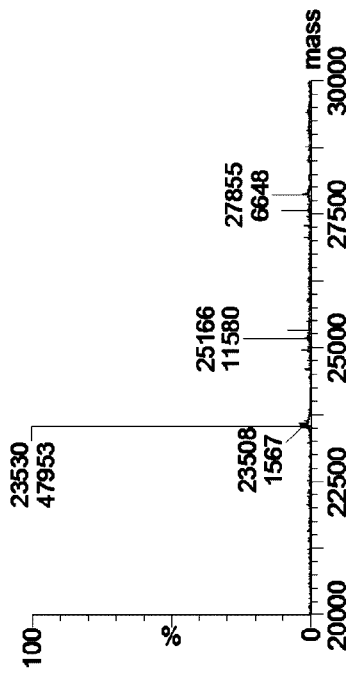


FIG. 5F. Antibody 06

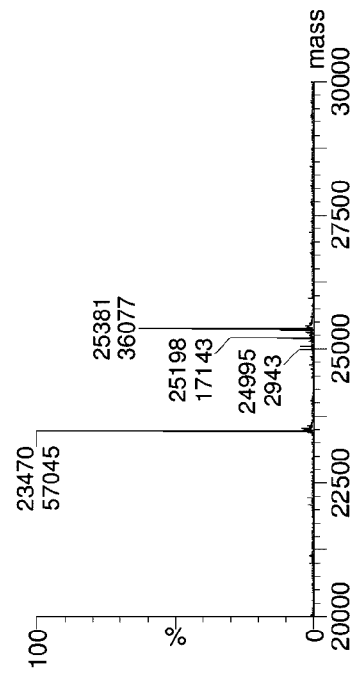


FIG. 5A. Antibody 02

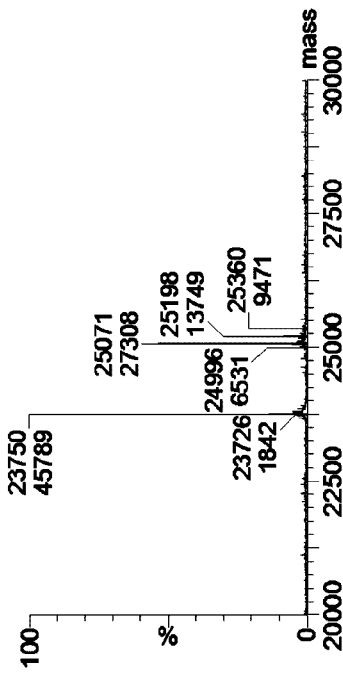


FIG. 5C. Antibody 01

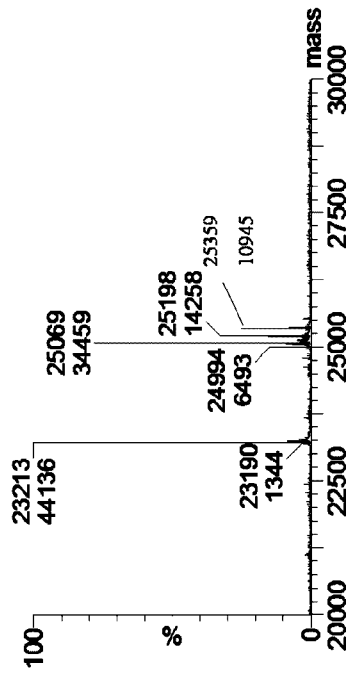


FIG. 5E. Antibody 05

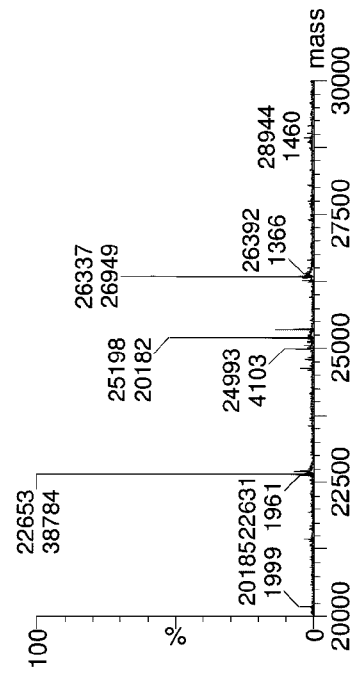


FIGURE 6

hu Cy
118
AST**K**GPSVFP LAPSS**K**STSG GTAALGCLVK DYFPEPVTS WNSGALTSGV HTFPAVLQSS GLYSLSSVVT VPSSSLGTQT YICNVNH**K**PS NT**K**VDD**K**KVEP
218
KSCD**K**THTCP PCPAPELLGG PSVFLFPP**K** **K**DTLMISRTP EVTCVVVDVS HEDPEV**K**FNW YVDGVEVHNA **K**T**K**PREEQYN STYRVVSVLT VLVHQLWLNG**K**
318
EYKC**K**VS**K**A LPAPIE**K**TIS KA**K**GQPREPQ VYTLPPSRDE LT**K**QVSLTC LVKGFYPSDI AVEWESNGQP ENNY**K**TTTPV LDSDGSFFLY SKLTVDD**K**SRW
418
447
QQGNVFSCSV MHEALHNHYT **Q****K**SLSLSPG**K**
hu Ck
108
RTVAAPSVFI FPPSDEQL**K**S GTASVVCLLN NFYPREA**K**VQ **W**KVDNALQSG NSQESVTEQD **S****K**DSTYSLSS TLTL**K**ADYE **K****H****K**VYACEVT HQGLSSPVT**K**
208
SFNRGEC
hu Cλ
110
GQP**K**AAPSVT LFPSPSEELQ AN**K**ATLVCLI SDFYPGAVTV AWKADSSP**V****K** AGVETTTPSK QSN**K**YAASS YLSLTPEQ**W** SHKSYSCQVT HEGSTVE**K**TV
210
APTECS

[Fig. 7-1]

FIGURE 7

CH1		Upper Hinge		CH2		CH3	
RFU	conjugation	RFU	conjugation	RFU	conjugation	RFU	conjugation
A116K	0.0%	E215K	0.0%	G236K		G341K	
S119K	0.0%	P217K	0.0%	G337K		Q342K	
T120K	43.2%	S218K	0.0%	P247K	75.1%	P343K	0.0%
G122K	0.0%	D221K	97.6%	M252K		S344K	
S131K	0.0%	P222K	90.8%	T253K		E345K	
S132K	0.0%	H224K	71.6%	S254K		R355K	
S134K	0.0%	Y225K	100.0%	H255K		D356K	
T135K	80.4%			T256K		L358K	
S136K	100.0%	Middle Hinge		D265K		T359K	
G137K	38.9%			S267K		N361K	
G138K	0.0%	C268K	0.0%	M268K		Q362K	
T139K	23.4%	P227K	0.0%	E269K		S375K	
E155K	0.0%	P228K	0.0%	D270K		Q376K	
P153K	0.0%	C229K	0.0%	F271K		E382K	
S160K	0.0%	E230K	0.0%	E272K		N394K	
A162K	0.0%			D290K		G395K	0.0%
L163K	0.0%	Lower Hinge		G291K		Q396K	
T164K	0.0%			V282K	0.0%	P387K	
S165K	0.0%	A231K	0.0%	E283K	0.0%	N389K	
G166K	0.0%	P232K	0.0%	V284K	0.0%	N390K	
V167K	0.0%	E233K	0.0%	H285K	0.0%	L395K	
S176K	0.0%	L234K	0.0%	M286K	0.0%	S400K	
S177K	0.0%	L235K	0.0%	A287K	0.0%	S401K	
G178K	0.0%			T289K		G402K	
L179K	0.0%			Q295K		S433K	
P189K	0.0%			Y296K		S435K	
S190K	0.0%			N297K		S436K	
S191K	0.0%			S298K		C418K	
S192K	35.6%			L309K		C419K	
L193K	84.8%			H310K		G420K	0.0%
G194K	0.0%			Q311K		N421K	
T195K	0.0%			D312K		Y422K	
Q196K	0.0%			L314K		A431K	0.0%
T197K	0.0%			G316K		H433K	
E206K	0.0%			E318K		W434K	
S207K				A327K		Y436K	0.0%
				F329K		S442K	
				A330K		L443K	0.0%
				F332K		S444K	0.0%
				E333K		E445K	75.5%
				S337K		G446K	
				A339K			

[Fig. 7-2]

FIGURE 7 (CONTINUED)

	kappa	conjugation	lambda	conjugation	Controls	
					RF0	conjugation
E108K	277.20		G110K	277.20	M009	0.0%
T109K	277.20		Q111K	277.20	M009L	100.0%
V110K	277.20		P112K	277.20		
A112K	277.20		A115K	277.20		
D122K	277.20		S125K	277.20		
E123K	277.20		E126K	277.20		
G127K	277.20		L129K	277.20		
G138K	277.20		Q129K	277.20		
T129K	277.20		A130K	277.20		
S142K	277.20		N131K	277.20		
E143K	277.20		G145K	277.20		
D151K	277.20	0.0%	A146K	277.20		
N152K	277.20		V147K	277.20		0.0%
A153K	277.20		S155K	277.20		
L154K	277.20		S156K	277.20		
Q155K	277.20		P157K	277.20		
S156K	277.20		A160K	277.20		
G157K	277.20		S161K	277.20		
E165K	277.20		S171K	277.20		
D167K	277.20		N172K	277.20		
S168K	277.20		N173K	277.20		
D170K	277.20		T184K	277.20		
S182K	277.20		E186K	277.20		
A184K	277.20		Q187K	277.20		22.6%
E187K	277.20		S190K	277.20		
H189K	277.20		H191K	277.20		
V191K	277.20		E201K	277.20		
Q199K	277.20		G202K	277.20		
G200K	277.20		S203K	277.20		
L201K	277.20	84.6%	E211K	277.20		
S202K	277.20	100.0%	T212K	277.20		
S203K	277.20		E213K	277.20		81.8%
E204K	277.20		S215K	277.20		
N210K	277.20					
R211K	277.20					
G212K	277.20					
E213K	277.20	54.1%				

[Fig. 8]

FIGURE 8

2-Gln-Gly-CAD-ricitin: +631Da
LC

	Fd				Fc			
	Calculated	Observed	dMass	percent	Calculated	Observed	dMass	percent
S115K-CH1	23216	23216	0	100.0%	25099	25099	0.0%	0.0%
S136K-CH1	23216	23217	1	100.0%	25113	25113	0	16.2%
	23216			0.0%	25113	25745	632	83.8%
T221K-hg	23216	23216	0	100.0%	25099	25099	0	16.2%
	23216			0.0%	25099	25716	631	83.9%
T223K-hg	23216	23217	1	100.0%	25099	25100	1	57.4%
	23216			0.0%	25099	25731	632	42.5%
R224K-hg	23216	23216	0	100.0%	25099	25064	1	43.8%
	23216			0.0%	25099	25685	630	56.2%
T225K-hg	23216	23215	-1	100.0%	25099	25099	0	70.0%
	23216			0.0%	25099	25729	630	30.0%
M252K-CH2	23216	23216	0	100.0%	25072	25071	-1	100.0%
	23216			0.0%	25072			0.0%
N297K-CH2	23216	23217	1	100.0%	25072	25071	-1	100.0%
	23216			0.0%	25072			0.0%
R445K-CH3	23216	23217	1	100.0%	25072	25071	-1	100.0%
	23216			0.0%	25072			0.0%
L201K-CK	23231	23229	-2	18.0%	25072	25072	0	100.0%
	23231	23664	633	82.0%	25072			0.0%
S203K-CK	23257	23258	1	12.3%	25072	25071	-1	100.0%
	23257	23990	633	87.7%	25072			0.0%

% conjugation	
S115K-CH1	100.0%
S136K-CH1	93.8%
T221K-hg	83.9%
T223K-hg	42.6%
R224K-hg	56.4%
T225K-hg	30.0%
R252K-CH2	96.3%
N297K-CH2	ND
R445K-CH3	100.0%
L201K-CK	62.0%
S203K-CK	87.7%

FIGURE 9

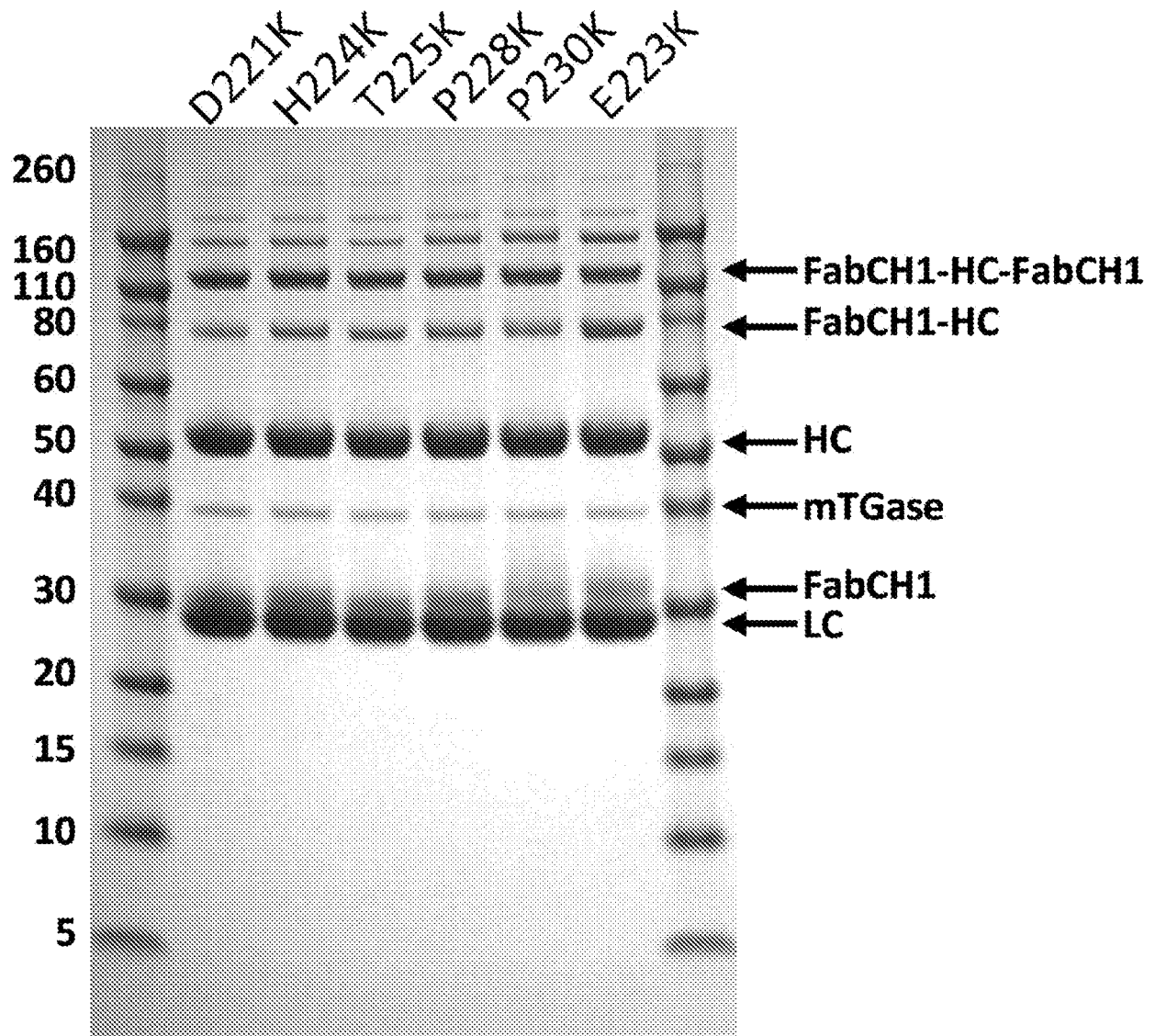
	Z-Gln-Gly-N ₁					Z-Gln-Gly-PEG ₂ -ECN					Z-Gln-Gly-PEG ₂ -AsF					
	% HC conjugation		% LC conjugation		Ave EAR	% HC conjugation		% LC conjugation		Ave EAR	% HC conjugation		% LC conjugation		Ave EAR	
	DAR 1	DAR 2	DAR 1	DAR 2		DAR 1	DAR 2	DAR 1	DAR 2		DAR 1	DAR 2	DAR 1	DAR 2		
T135HC/T301KLC	78.6%	0.0%	100.0%		3.57	ND	ND	ND	0.0%		0.31*	56.6%	0.0%	94.6%		3.06±3.3
T135HC/S202KLC	74.9%	0.0%	70.3%		2.90	41.9%	0.0%	0.0%			0.84	58.4%	0.0%	49.6%		1.65927
T135HC/L446HC	41.8%	56.7%	0.0%		3.10	ND	ND	ND	0.0%		ND	57.1%	24.7%	0.0%		2.12690
T135N/L446HC/L201KLC	33.2%	59.3%	100.0%		5.04	ND	ND	ND	0.0%		0.80*	61.2%	13.4%	90.8%		3.57403
T135N/L446HC/S302KLC	39.8%	53.2%	77.1%		4.43	42.2%	18.9%	0.0%			1.64	0.5%	0.0%	34.1%		3.75939

[Fig. 10]

FIGURE 10

	X	X
hu IgG1	GPSVFLFPKPKDITLMISRTPEVTCVVVDVS EDPEV FWYVDGVEVHNAKTKPREEQ QNST RVVSVLTV HQDWLNGKEYKCKVSNKGLP IEKT	
hu IgG2	GPSVFLFPKPKDITLMISRTPEVTCVVVDVS EDPEV FWYVDGVEVHNAKTKPREEQ QNST RVVSVLTV HQDWLNGKEYKCKVSNKGLP IEKT	
hu IgG3	GPSVFLFPKPKDITLMISRTPEVTCVVVDVS EDPEV FWYVDGVEVHNAKTKPREEQ QNST RVVSVLTV HQDWLNGKEYKCKVSNKGLP IEKT	
hu IgG4	GPSVFLFPKPKDITLMISRTPEVTCVVVDVS EDPEV FWYVDGVEVHNAKTKPREEQ QNST RVVSVLTV HQDWLNGKEYKCKVSNKGLP IEKT	
hu IgG1	ISK KGQPREPQVYTLPPS DEITKNQVSLTCLVKGFPSPDIAVEWES SGOPENNY ITPP LDSDGSFFLYS LTVDKSRWQ GN WFSCSVMHEALHNN	
hu IgG2	ISK KGQPREPQVYTLPPS DEITKNQVSLTCLVKGFPSPDIAVEWES SGOPENNY ITPP LDSDGSFFLYS LTVDKSRWQ GN WFSCSVMHEALHNN	
hu IgG3	ISK KGQPREPQVYTLPPS DEITKNQVSLTCLVKGFPSPDIAVEWES SGOPENNY ITPP LDSDGSFFLYS LTVDKSRWQ GN WFSCSVMHEALHNN	
hu IgG4	ISK KGQPREPQVYTLPPS DEITKNQVSLTCLVKGFPSPDIAVEWES SGOPENNY ITPP LDSDGSFFLYS LTVDKSRWQ GN WFSCSVMHEALHNN	
hu IgG1	TQKSLSLS SGK	X
hu IgG2	TQKSLSLS SGK	
hu IgG3	TQKSLSLS SGK	
hu IgG4	TQKSLSLS SGK	

[Fig. 11]

FIGURE 11

[Fig. 12]

FIGURE 12