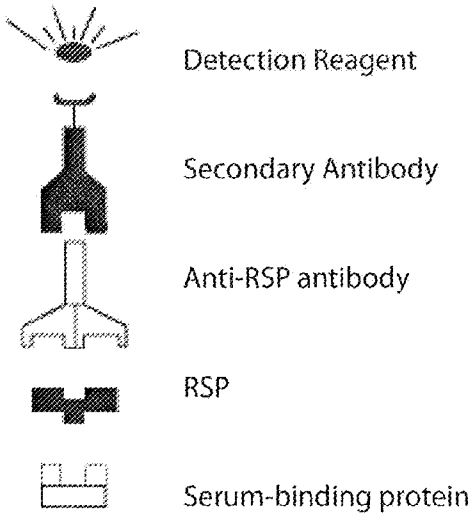
FIGURE 1


Detection Reagent
Secondary Antibody
Anti-RSP antibody
RSP
Serum-binding protein

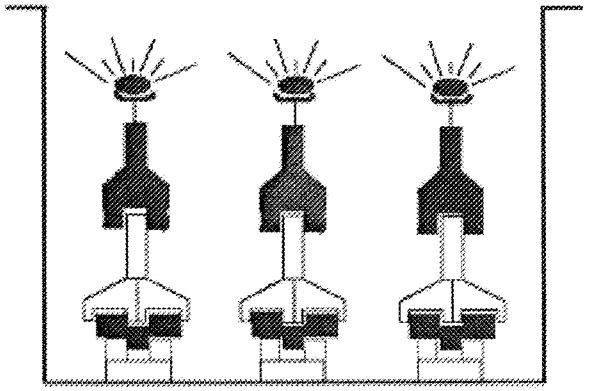


FIGURE 2

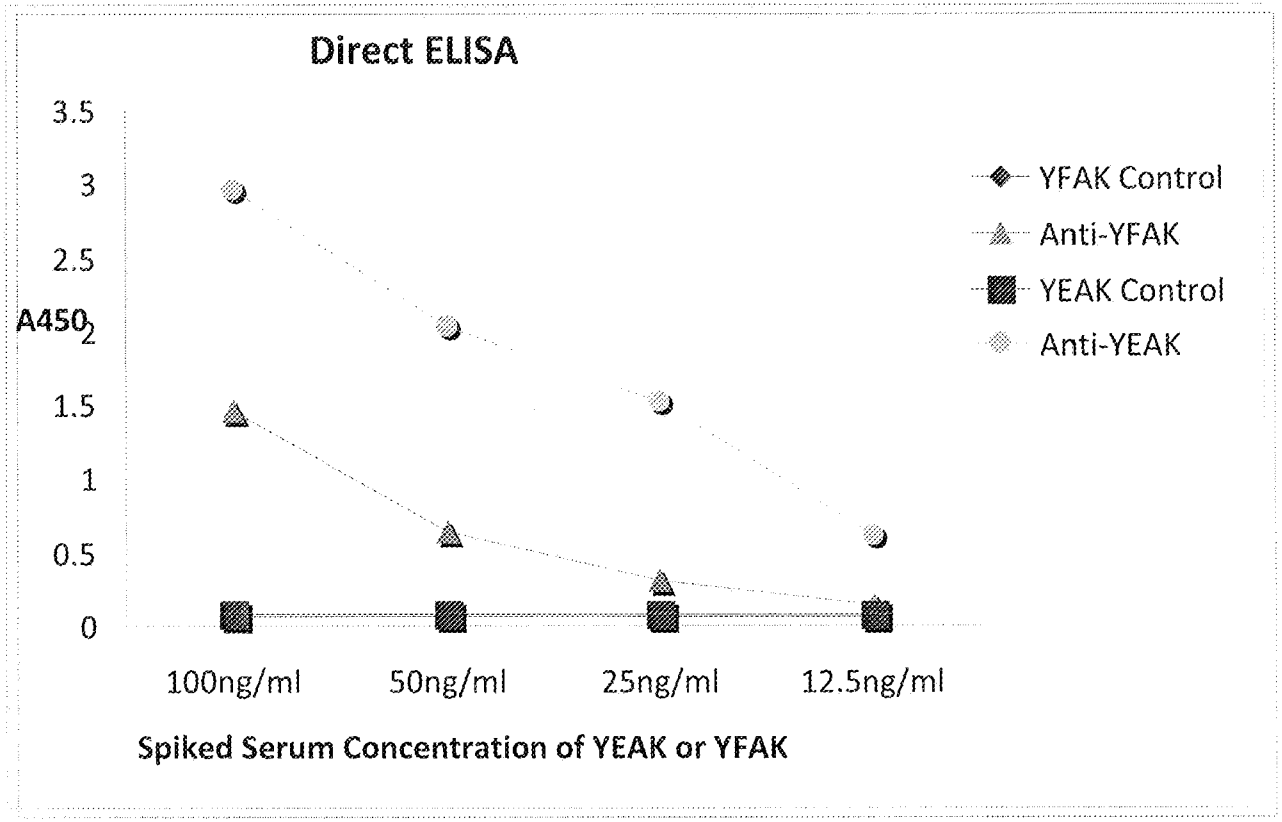

Direct ELISA
3.5
3
2.5
A450 2
1.5
1
0.5
0
100ng/ml
50ng/ml
25ng/ml
12.5ng/ml
Spiked Serum Concentration of YEAK or YFAK
YFAK Control
Anti-YFAK
YEAK Control
Anti-YEAK

FIGURE 3

PI-2301 lot U0517 with normal mouse serum		
protein identification	NCBI locus/accession no.	protein score (average of three significant ID)
Apolipoprotein A-I	Q9Z2L4	118
vitronectin	AAA40558	101
lumican	AAB35361	75

Copaxone with normal mouse serum		
protein identification	NCBI locus/accession no.	protein score (average of three significant ID)
Apolipoprotein A-I	Q9Z2L4	125
Inter-alpha-trypsin inhibitor heavy chain H1	Q61702	109
complement component 3	NP_058690	97
Inter-alpha-trypsin inhibitor heavy chain H2	Q61703	89
vitronectin	AAA40558	87

Copaxone with normal human serum		
protein identification	NCBI locus/accession no.	protein score (average of three significant ID)
complement component C3	AAA85332	397
apolipoprotein A-1 preproprotein	AAA51747	279
apolipoprotein A-II preproprotein (apolipoprotein D)	NP_001634 (AAB32200)	208
complement component C4A	AAA51855	193
trypsin inhibitor	CAA30160	183
inter-alpha-trypsin inhibitor family heavy chain-related protein (IHRP)	BAA07602	175
alpha-1-B-glycoprotein	OMHU1B	160
alpha-1-antitrypsin	AAA51546	156
apolipoprotein A-IV	AAA51744	147

FIGURE 3 (continued)

Copaxone with normal human serum		
ceruloplasmin	AAA51975	142
unnamed protein product (BLAST search IDs it as a IgM heavy chain)	CAA34971	134
apolipoprotein E	AAB59518	129
complement factor B	AAA16820	127
prealbumin	BAA00059	120
Chain C, Immunoglobulin M	2RCJ_C	105
immunoglobulin lambda light chain	CAA40939	104
Coagulation factor II (thrombin)	3F68_H	103
Ig kappa chain V-III (KAU cold agglutinin)	A23746	97
apolipoprotein J precursor	AAA51765	97
Ig A1 Bur	763134A	92
histidine-rich glycoprotein precursor	NP_000403	91
Alpha-2-HS-glycoprotein	P02765	82
gelsolin isoform a precursor	NP_000168	78
inhibitor,Kunitz type proteinase	0511271A	74
unnamed protein product (BLAST search IDs it as vitronectin)	CAA28659	72
Ig J-chain	AAA58902	67

PI-2301 lot U0517 with normal human serum		
protein identification	**NCBI locus/accession no.**	**protein score (average of three significant ID)**
apolipoprotein A-1 preproprotein	AAA51747	495
prealbumin	BAA00059	179
apolipoprotein A-IV	AAA51744	103
alpha-1-antitrypsin	AAA51546	102
apolipoprotein A-II preproprotein (apolipoprotein D)	NP_001634 (AAB32200)	84
apolipoprotein C-III	AAB59372	86
alpha-1-B-glycoprotein	OMHU1B	85

FIGURE 3 (continued)

in-house PI-2301 acetylated with normal human serum		
protein identification	**NCBI locus/accession no.**	**protein score (average of three significant ID)**
apolipoprotein A-1 preproprotein	AAA51747	515
prealbumin	BAA00059	170
apolipoprotein A-II preproprotein (apolipoprotein D)	NP_001634 (AAB32200)	123
alpha-1-antitrypsin	AAA51546	128
apolipoprotein A-IV	AAA51744	143
apolipoprotein C-III	AAB59372	100
alpha2-HS glycoprotein	BAA22651	88
alpha-1-B-glycoprotein	OMHU1B	79
apolipoprotein J precursor	AAA51765	72

in-house PI-2301 not acetylated with normal human serum		
protein identification	**NCBI locus/accession no.**	**protein score (average of three significant ID)**
apolipoprotein A-1 preproprotein	AAA51747	471
alpha-1-antitrypsin	AAA51546	209
apolipoprotein A-IV	AAA51744	150
prealbumin	BAA00059	177
apolipoprotein C-III	AAB59372	116
apolipoprotein A-II preproprotein (apolipoprotein D)	NP_001634 (AAB32200)	122
alpha-1-B-glycoprotein	OMHU1B	84
alpha2-HS glycoprotein	BAA22651	86

FIGURE 4. YEAK availability in mice

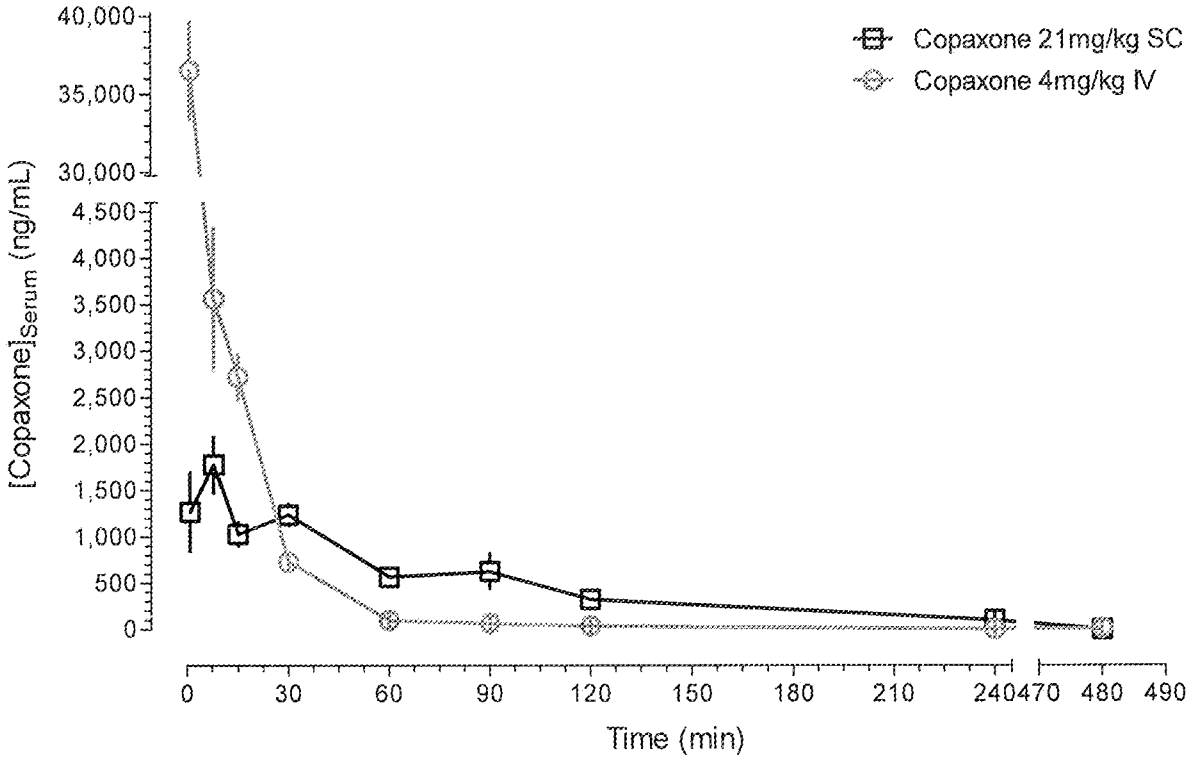


FIGURE 5. Linear correlation between maximum CCL22 plasma concentration and dose of Copaxone® administered SC to mice

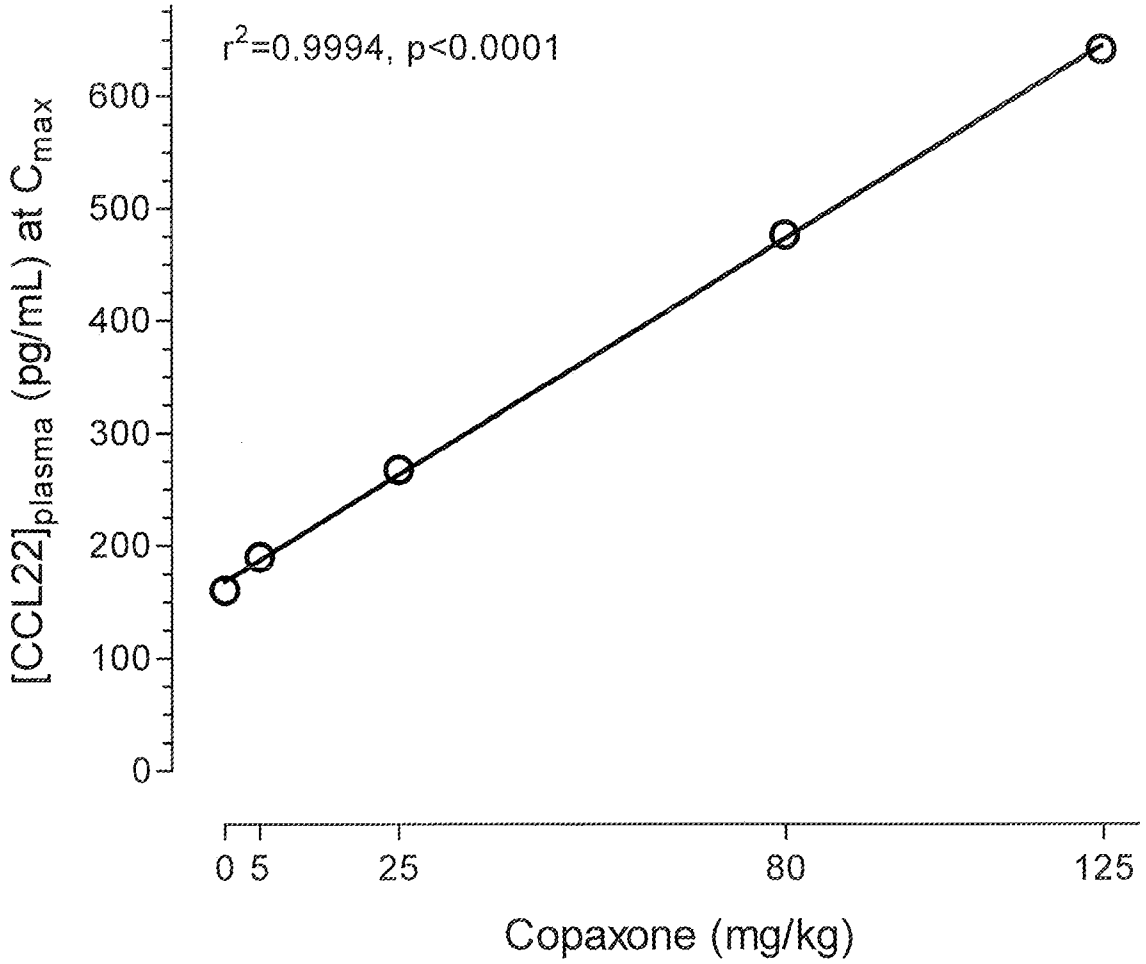


FIGURE 6. Representative peptide patterns observed by LC-MS from serum proteins eluted from YEAK fragments immobilized on a CNBr-Seph column

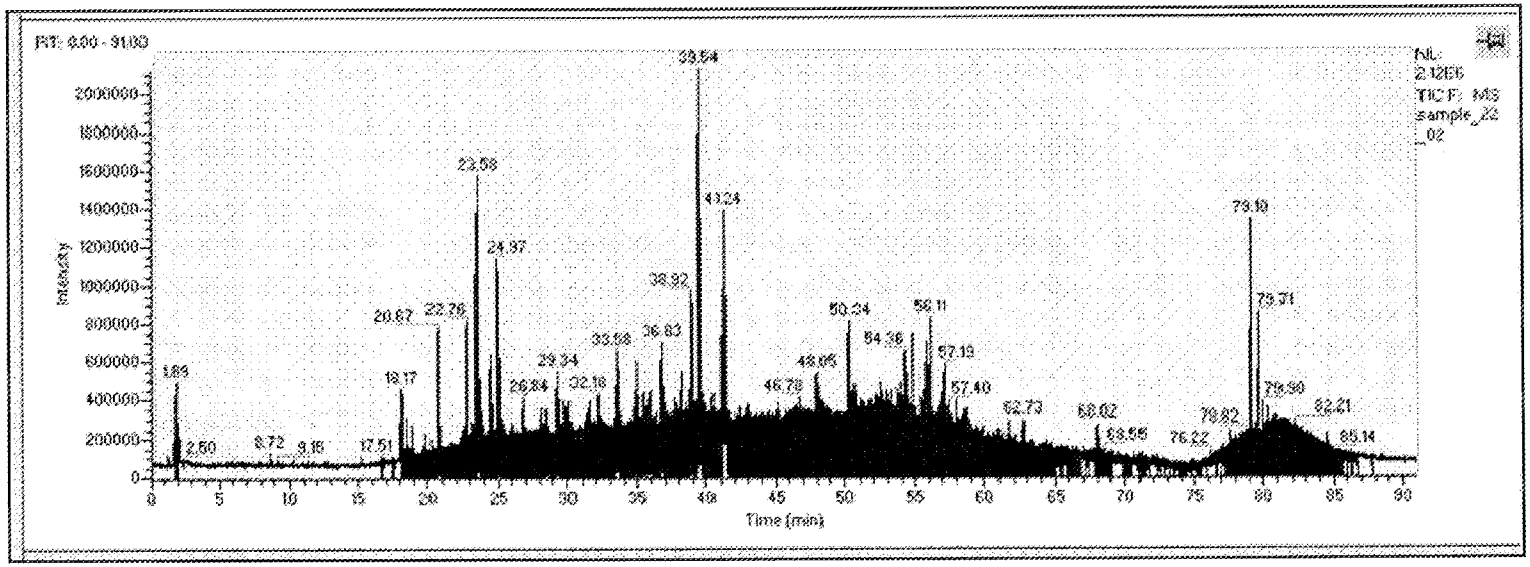


FIGURE 7. Standard curve using the new ELISA assay and spiking of glatiramer acetate into male, female or male/female pooled normal human sera

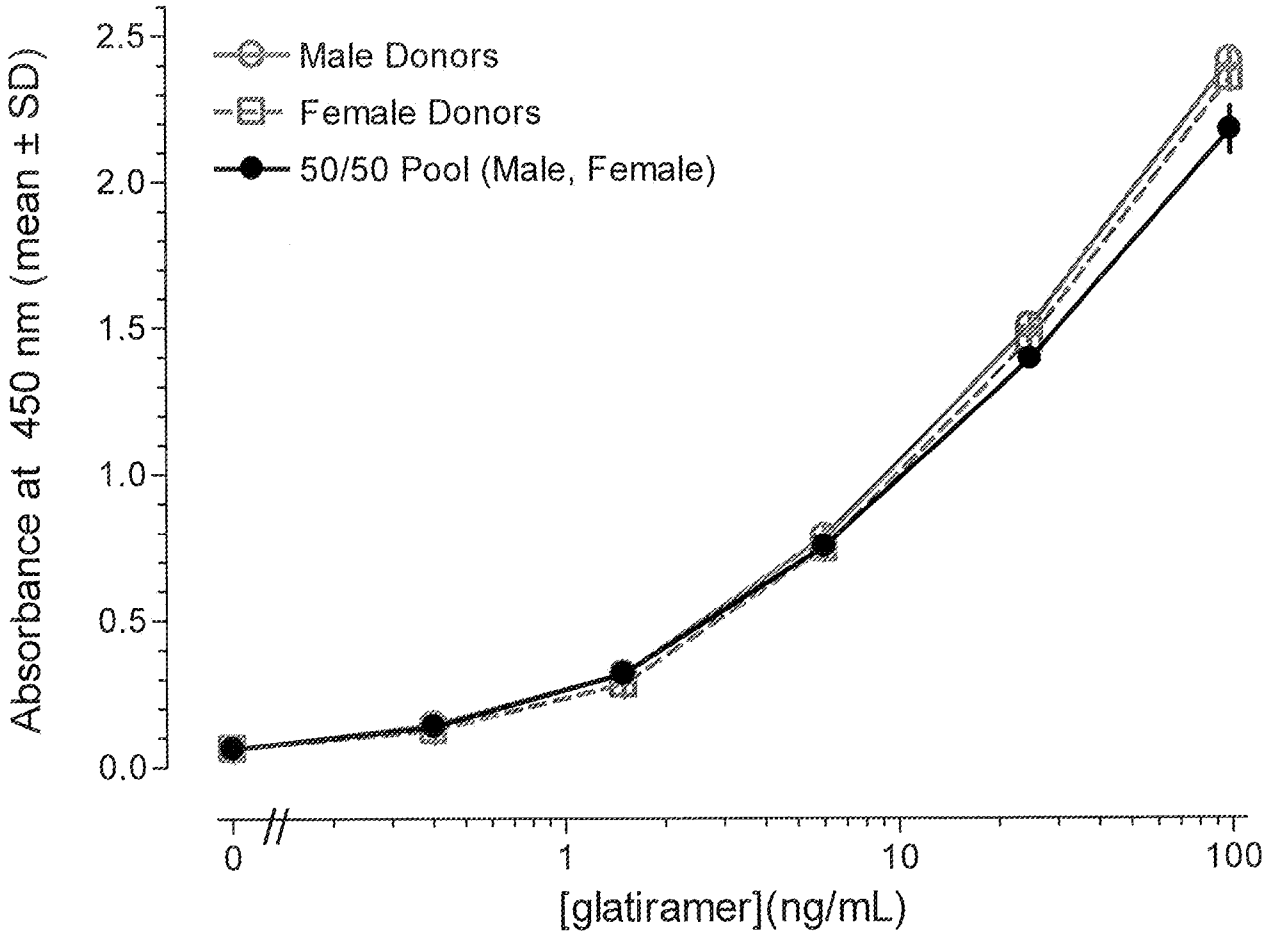


FIGURE 8. SE-HPLC profiles of Copaxone® lots #P53218 and #119142

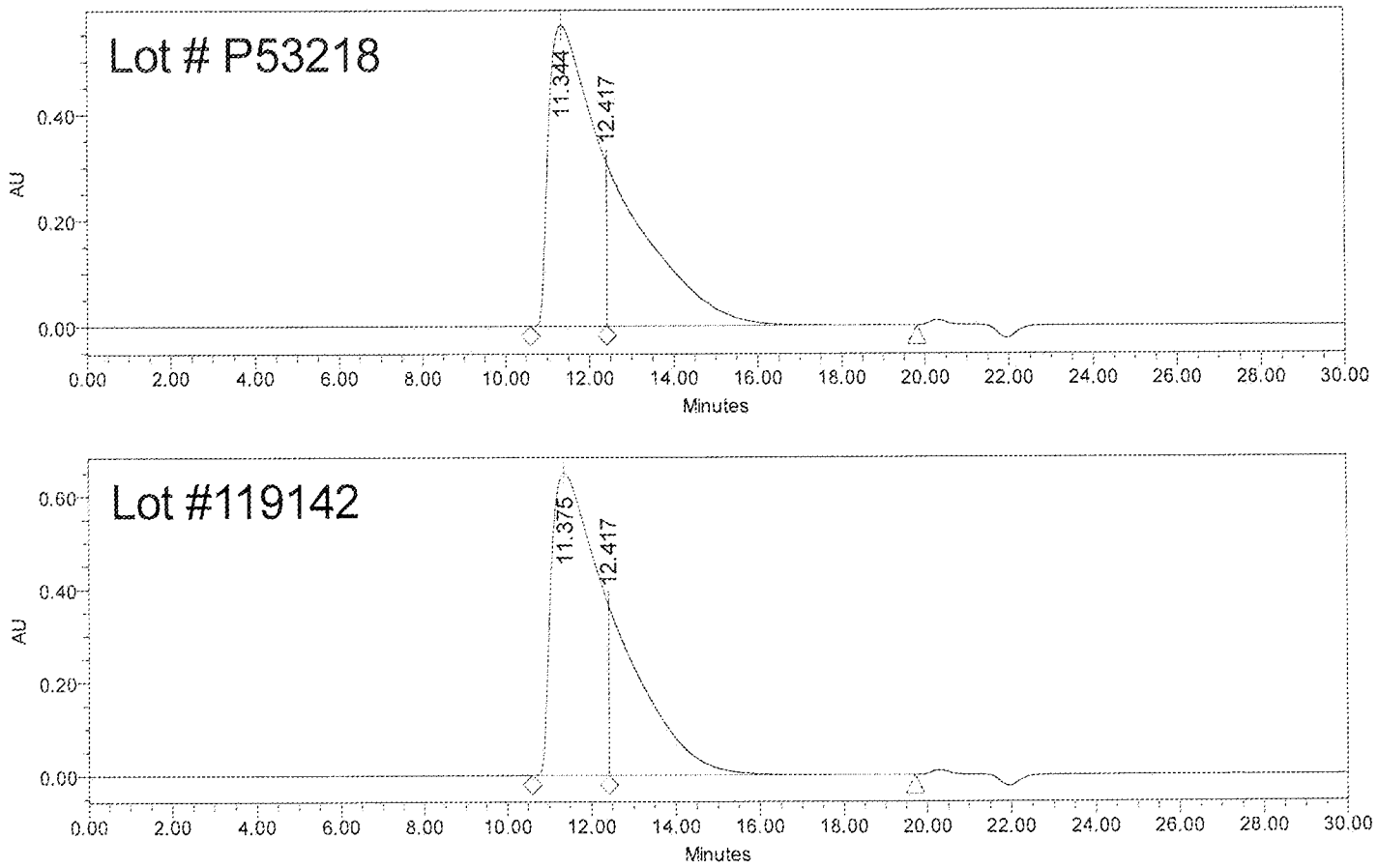


FIGURE 9. Standard curves using the new ELISA assay and comparing Copaxone® lots #P53218 and #119142

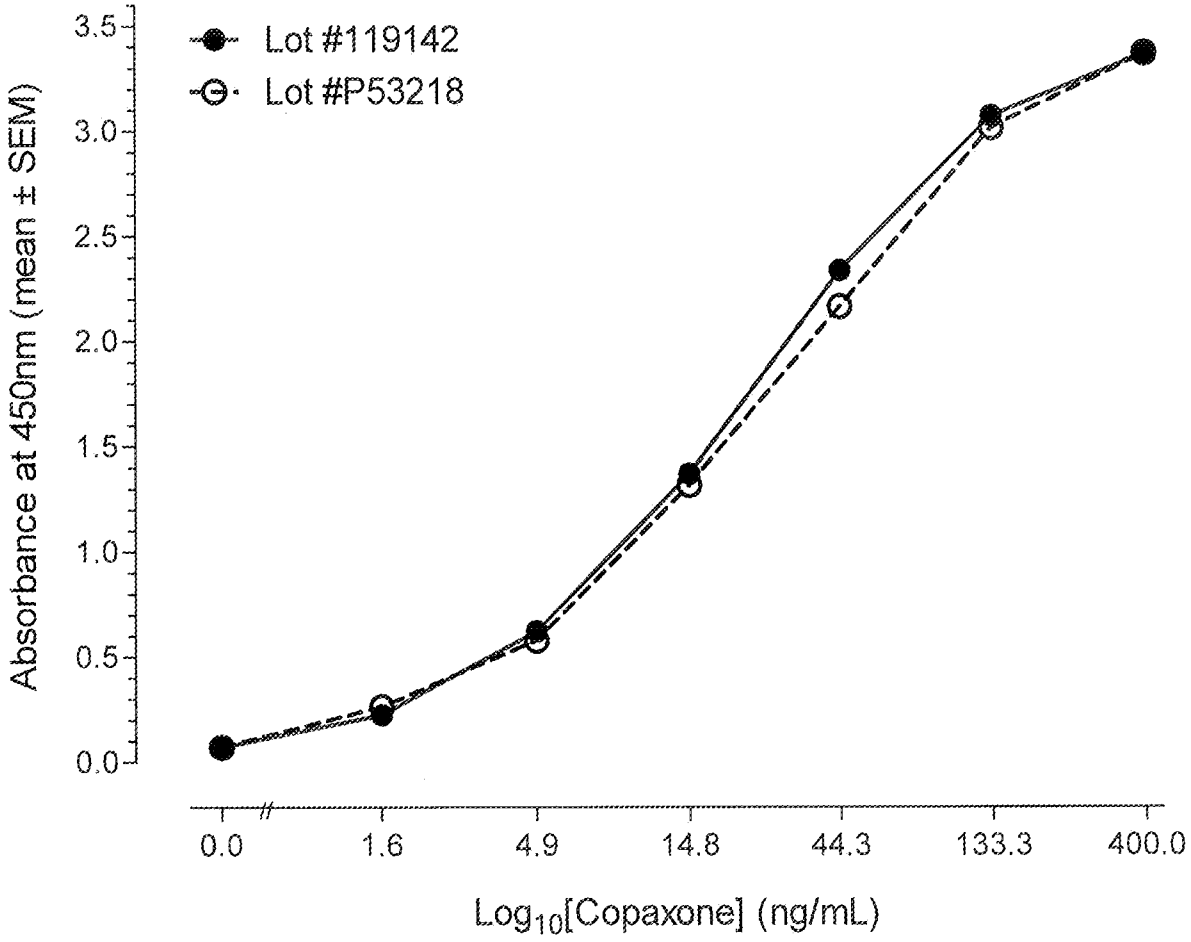


FIGURE 10. CCL22 release in culture medium of monocytes cultured with Copaxone® lots #P53218 and #119142

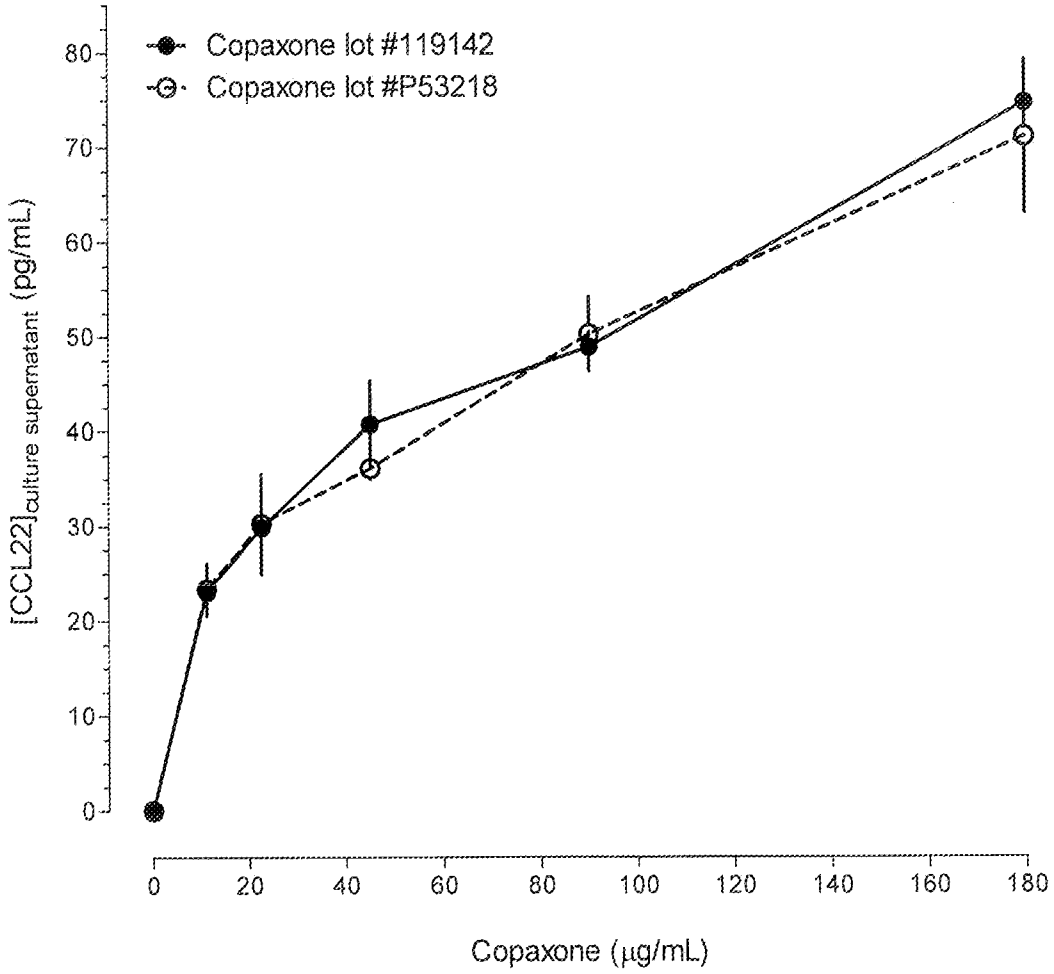


FIGURE 11. Linearity between amino acid length and average molecular weights of YEAK copolymers manufactured by solid phase peptide synthesis

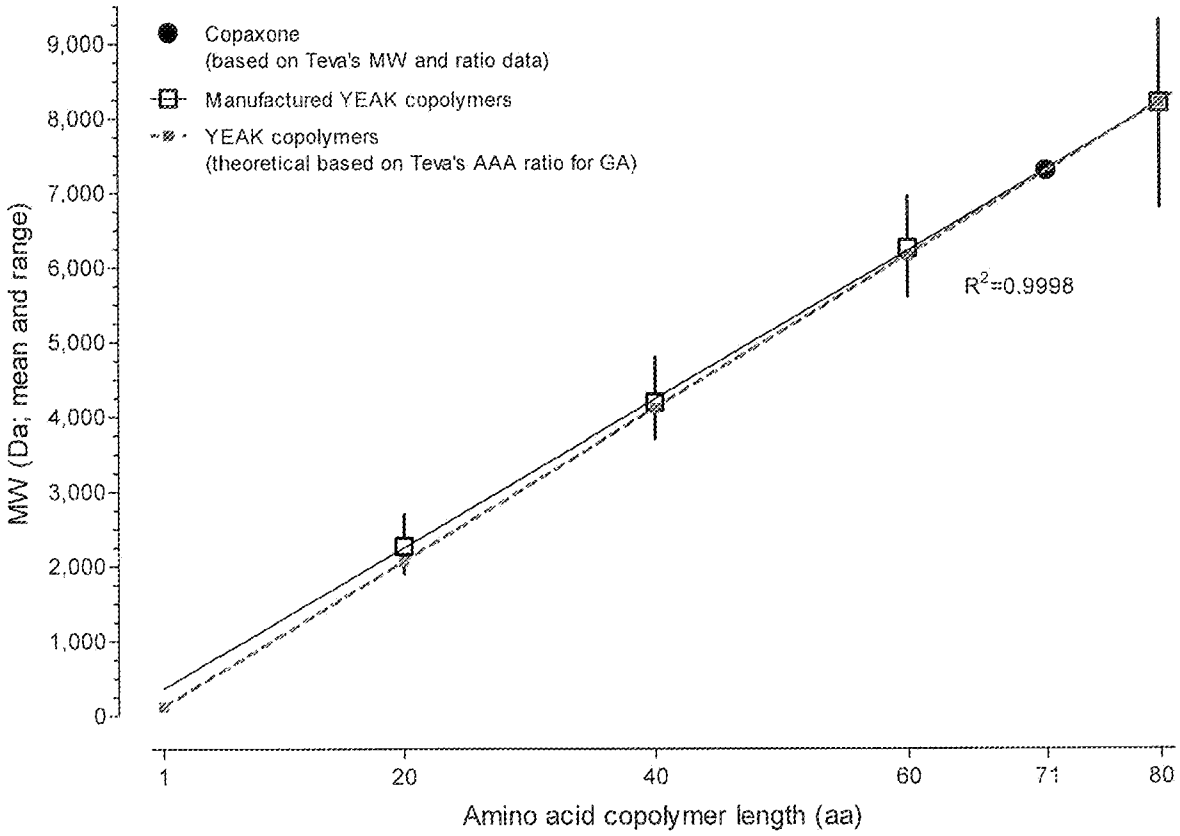
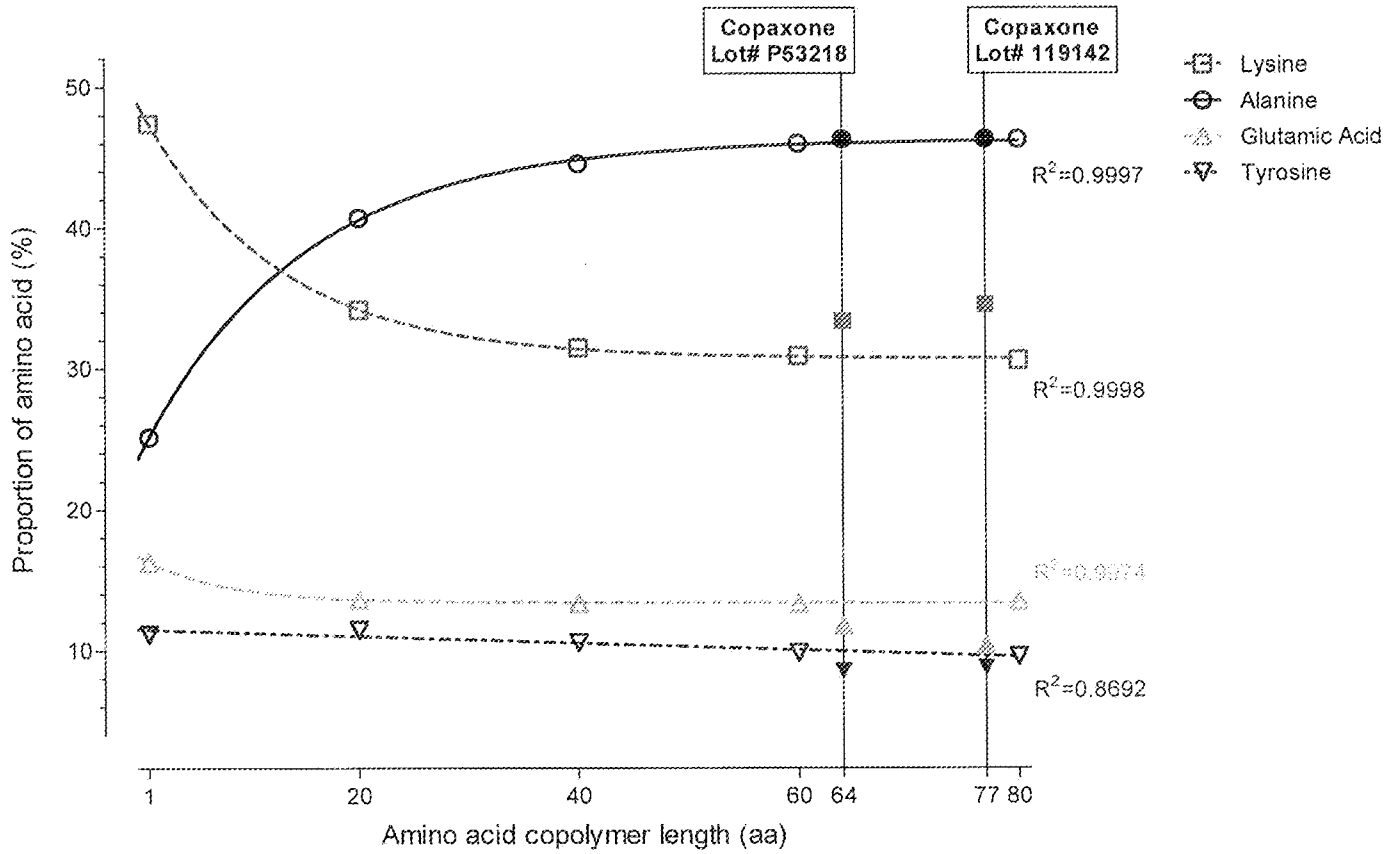


FIGURE 12. Proportion of Y, E, A and K amino acids normalized to 100 amino acids in YEAK copolymers manufactured by solid phase peptide synthesis



Based on amino acid and MALDI-TOF analyses.

FIGURE 13. Reactivity of the Immunoglobulin fraction of an anti-GA rabbit polyserum against YEAK amino acid copolymers manufactured by solid phase peptide synthesis

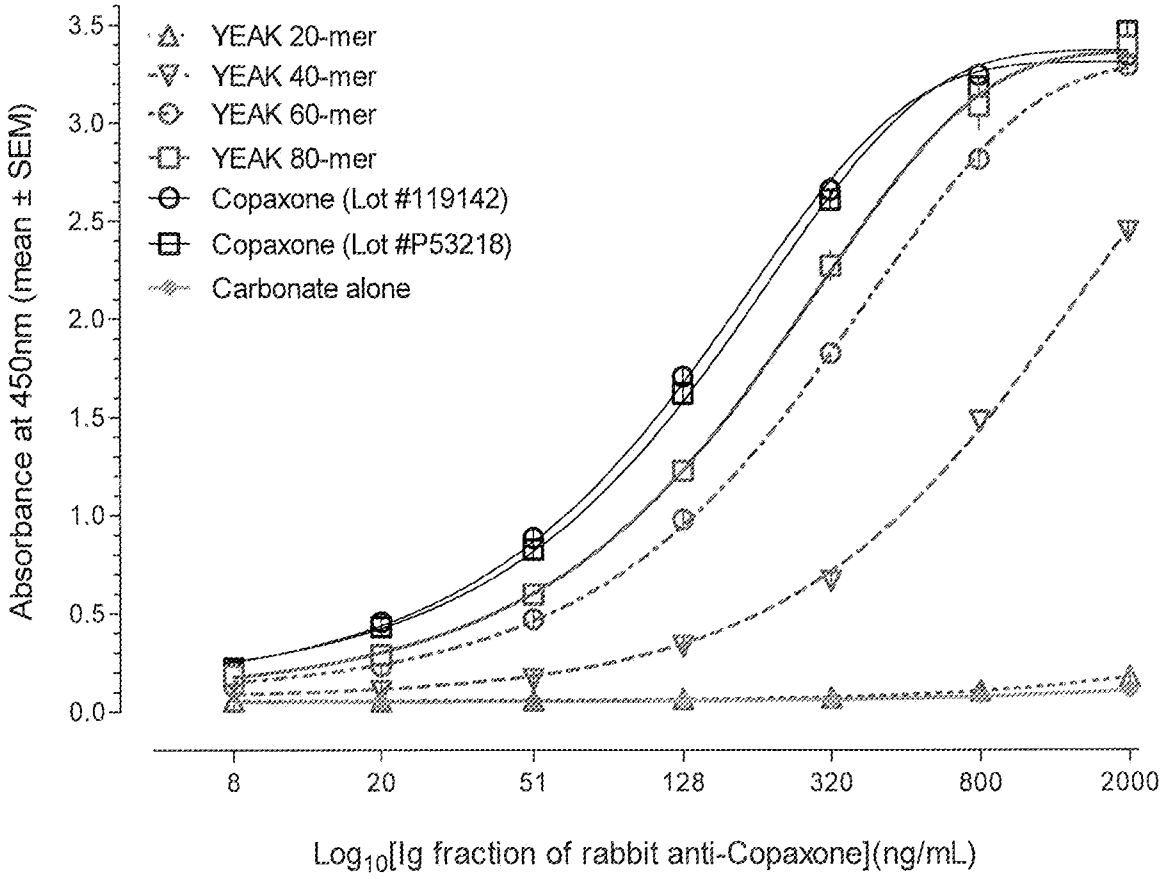


FIGURE 14. Standard curve using a previous PK method and YEAK copolymers compared to Copaxone®

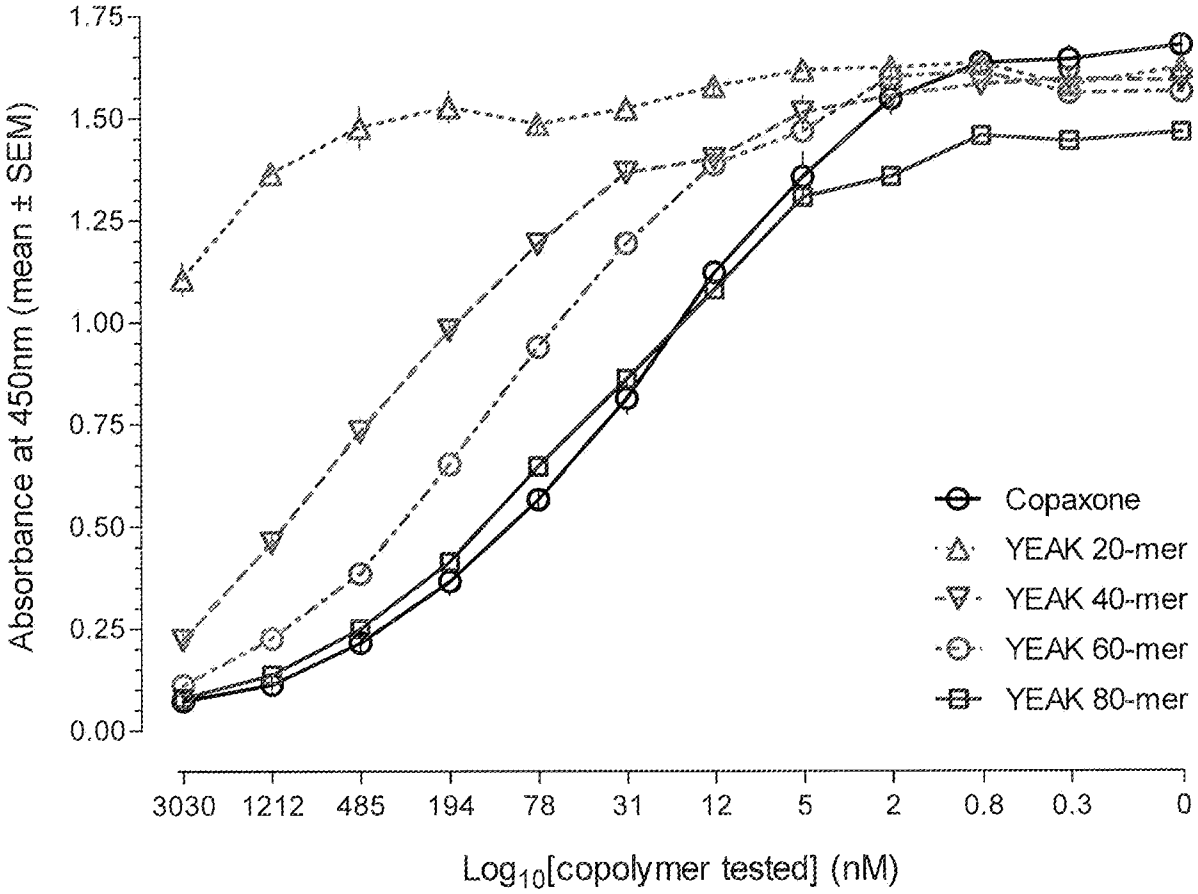


FIGURE15. Effect of YEAK copolymers on CCL22 release by monocyte cell line RAW264.7

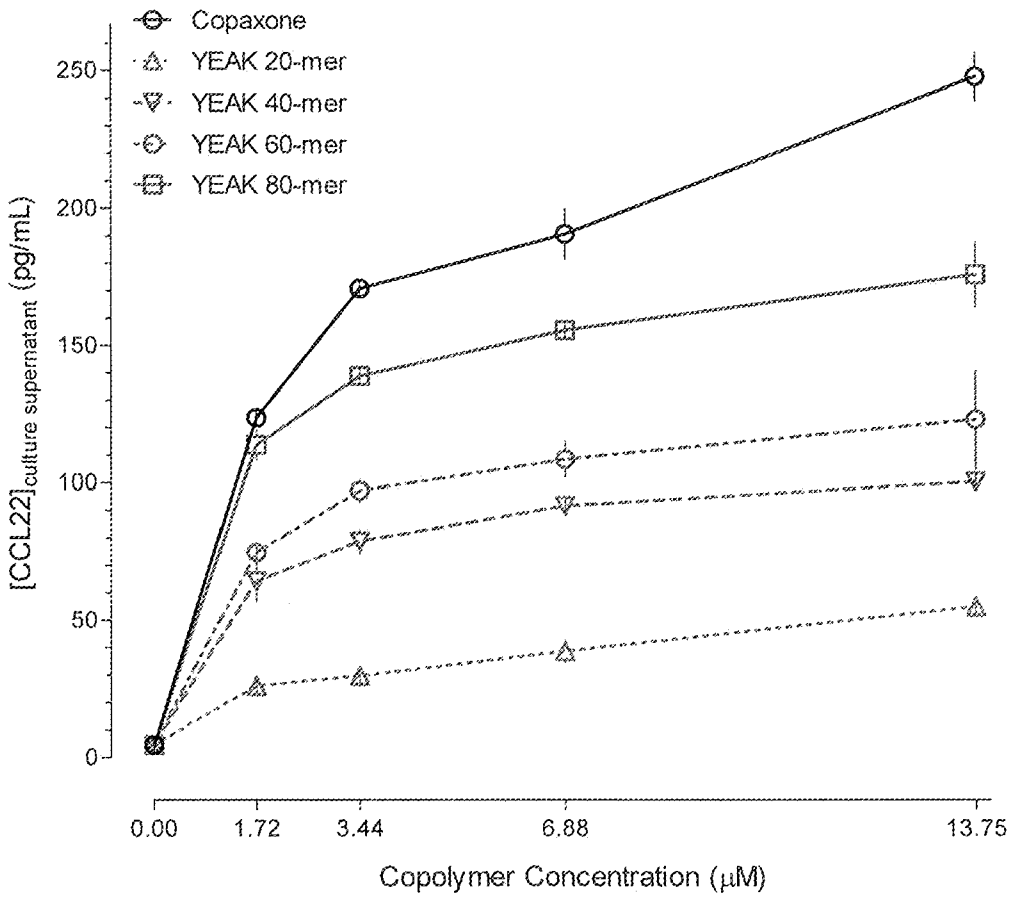


FIGURE 16. Effect of YEAK copolymers on mouse splenocyte recall response

