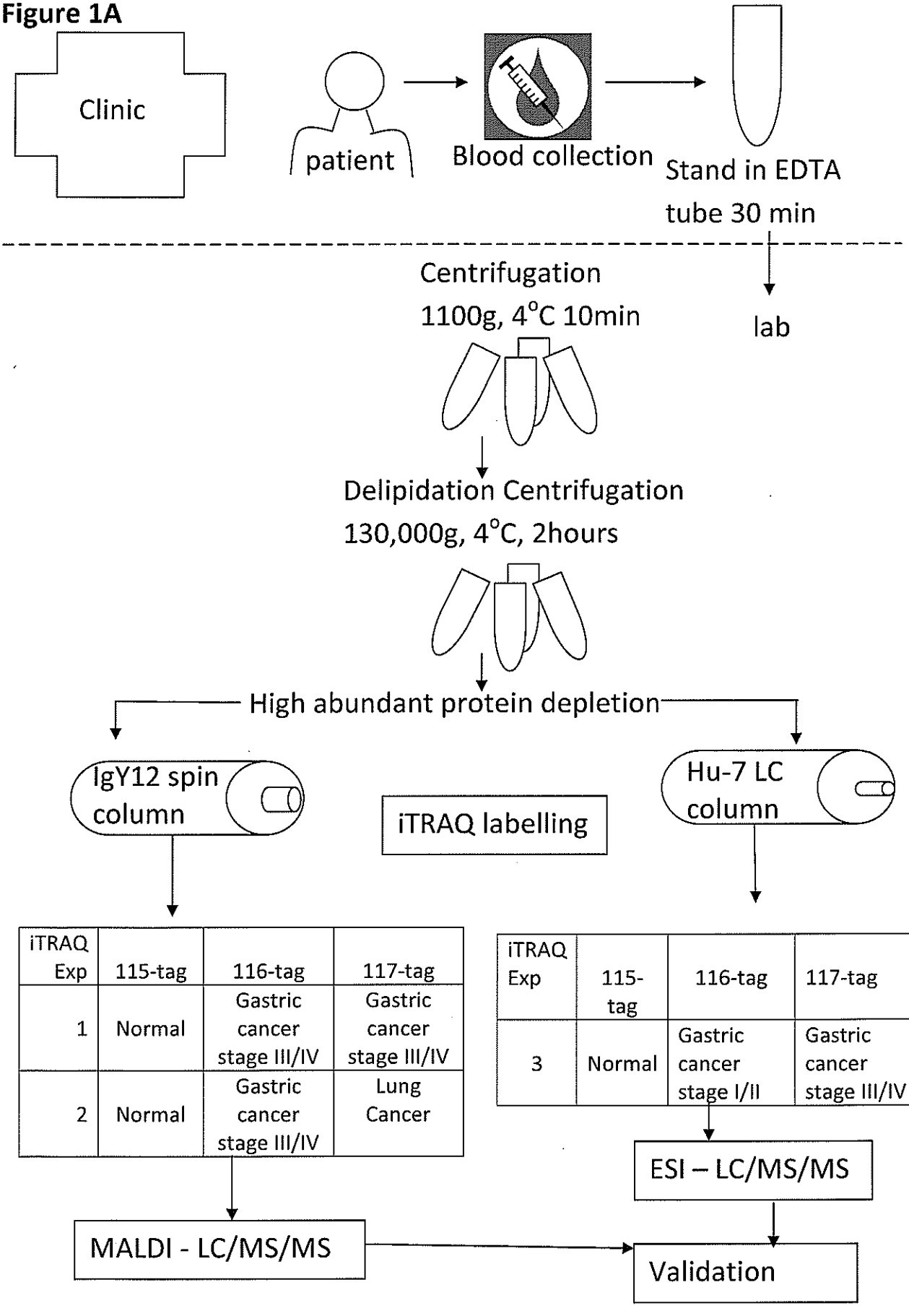
Figure 1A


Clinic
patient
Blood collection
Stand in EDTA tube 30 min
Centrifugation 1100g, 4°C 10min
lab
Delipidation Centrifugation 130,000g, 4°C, 2hours
High abundant protein depletion
IgY12 spin column
iTRAQ labelling
Hu-7 LC column
iTRAQ Exp | 115-tag | 116-tag | 117-tag
1 | Normal | Gastric cancer stage III/IV | Gastric cancer stage III/IV
2 | Normal | Gastric cancer stage III/IV | Lung Cancer
iTRAQ Exp | 115-tag | 116-tag | 117-tag
3 | Normal | Gastric cancer stage I/II | Gastric cancer stage III/IV
ESI – LC/MS/MS
MALDI - LC/MS/MS
Validation

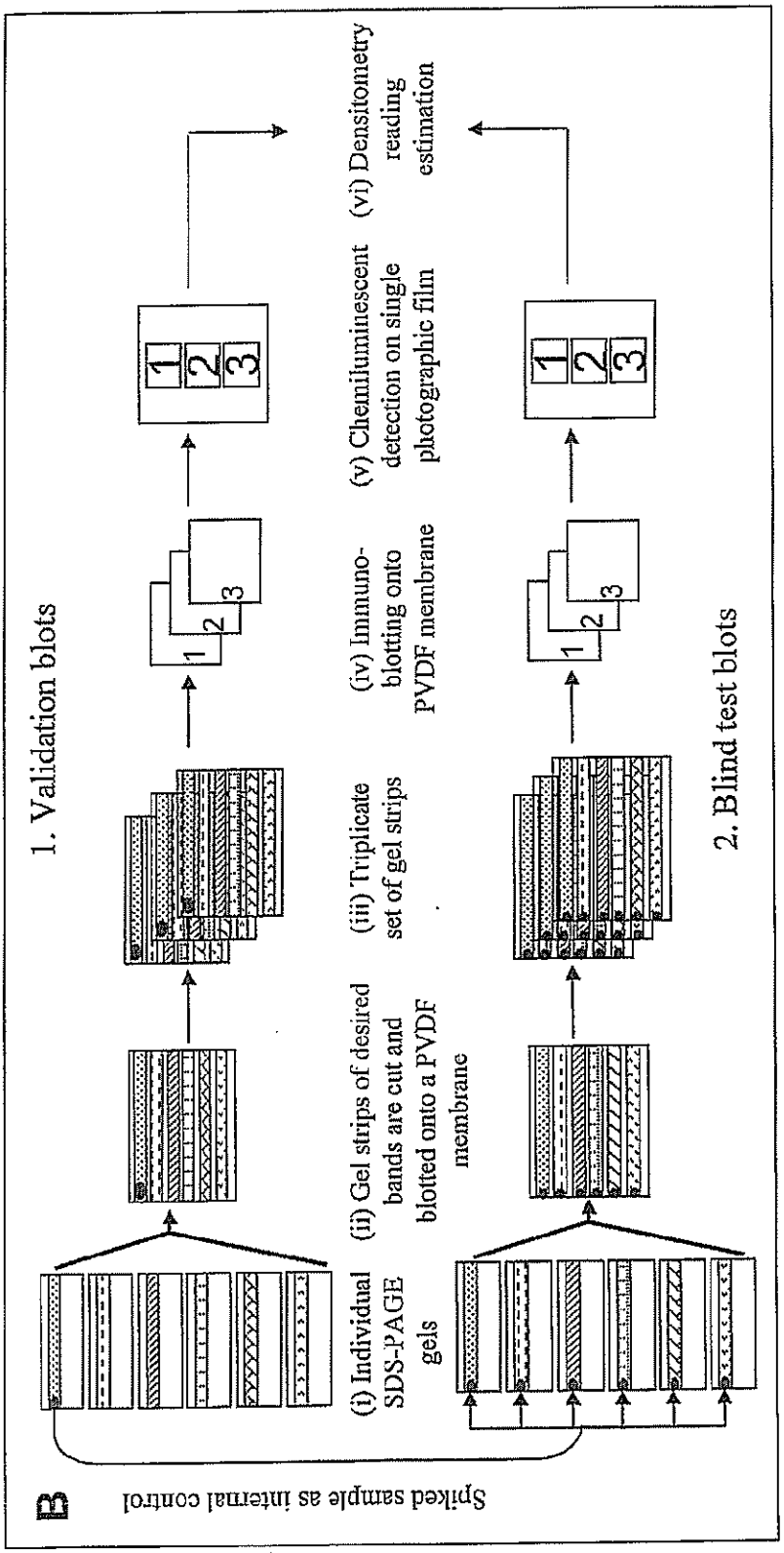
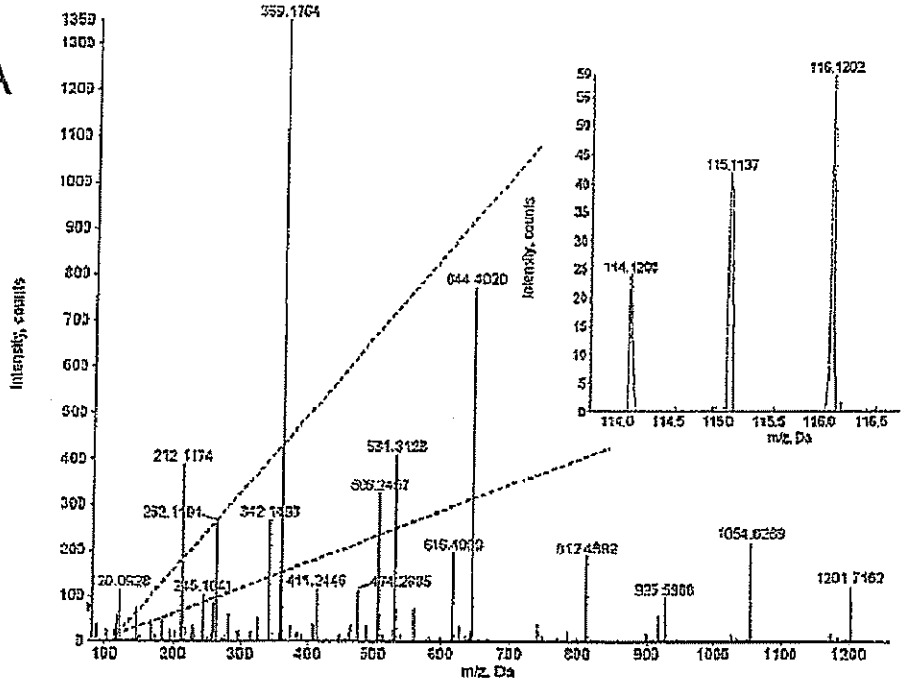

B
Spiked sample as internal control
(i) Individual SDS-PAGE gels
(ii) Gel strips of desired bands are cut and blotted onto a PVDF membrane
(iii) Triplicate set of gel strips
(iv) Immuno-blotting onto PVDF membrane
(v) Chemiluminescent detection on single photographic film
(vi) Densitometry reading estimation
1. Validation blots
2. Blind test blots
1
2
3

Figure 1B

Figure 2

A



B

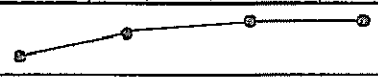
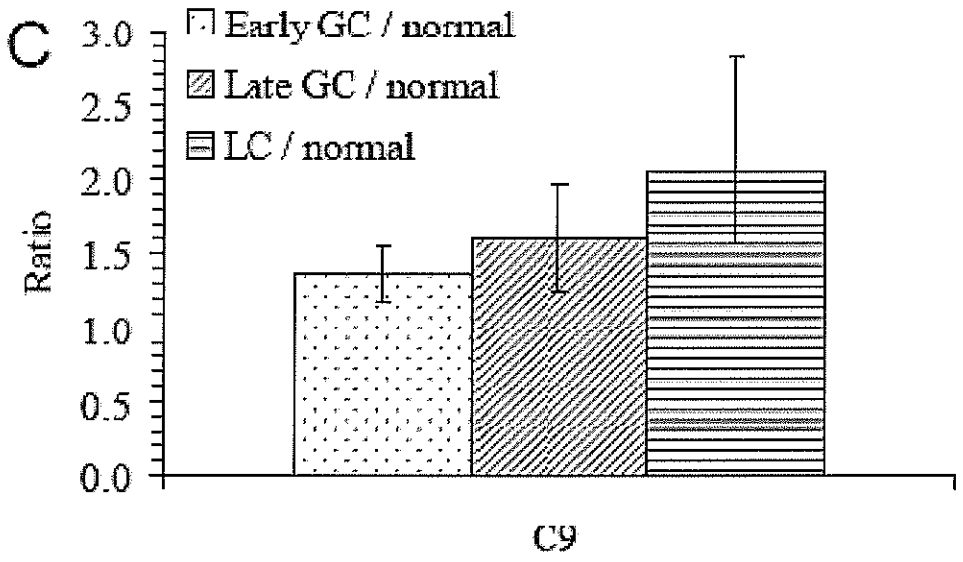
Protein Name	Method	Early GC : Normal	Late GC : Normal	LC : Normal	Expression trend (Normal | Early GC | Late GC | LC)
Complement component C9 precursor	iTRAQ ratio	1.31	1.56 *	1.60	
	IB ratio	1.30	1.45	1.63	

Figure 2


C
Early GC / normal
Late GC / normal
LC / normal
Ratio
3.0
2.5
2.0
1.5
1.0
0.5
0.0
C9

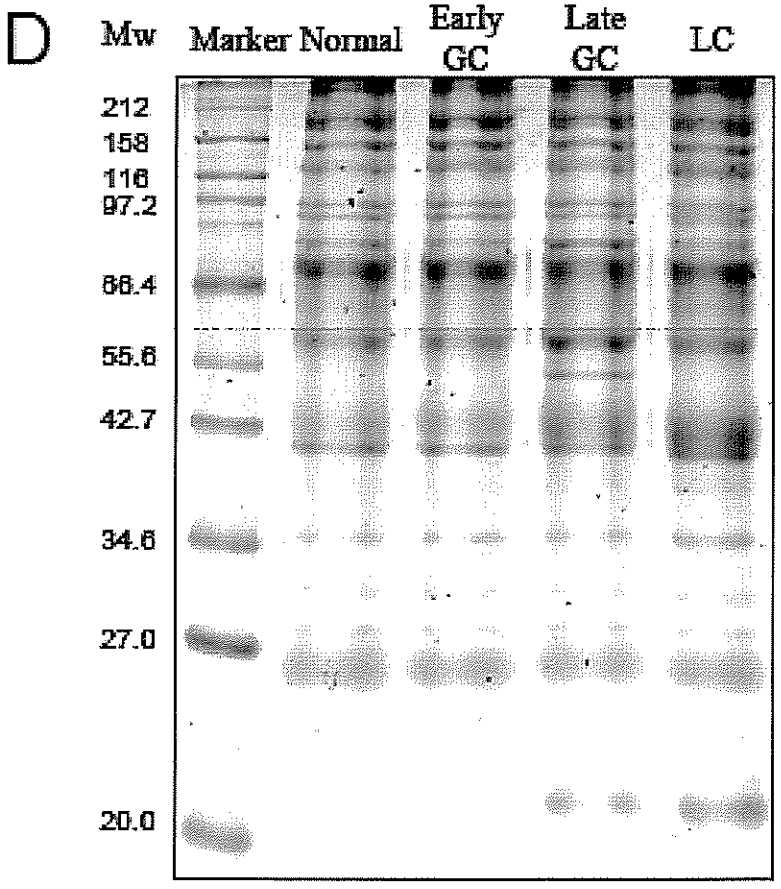

D
Mw
Marker
Normal
Early GC
Late GC
LC
212
158
116
97.2
66.4
55.6
42.7
34.6
27.0
20.0

Figure 3A

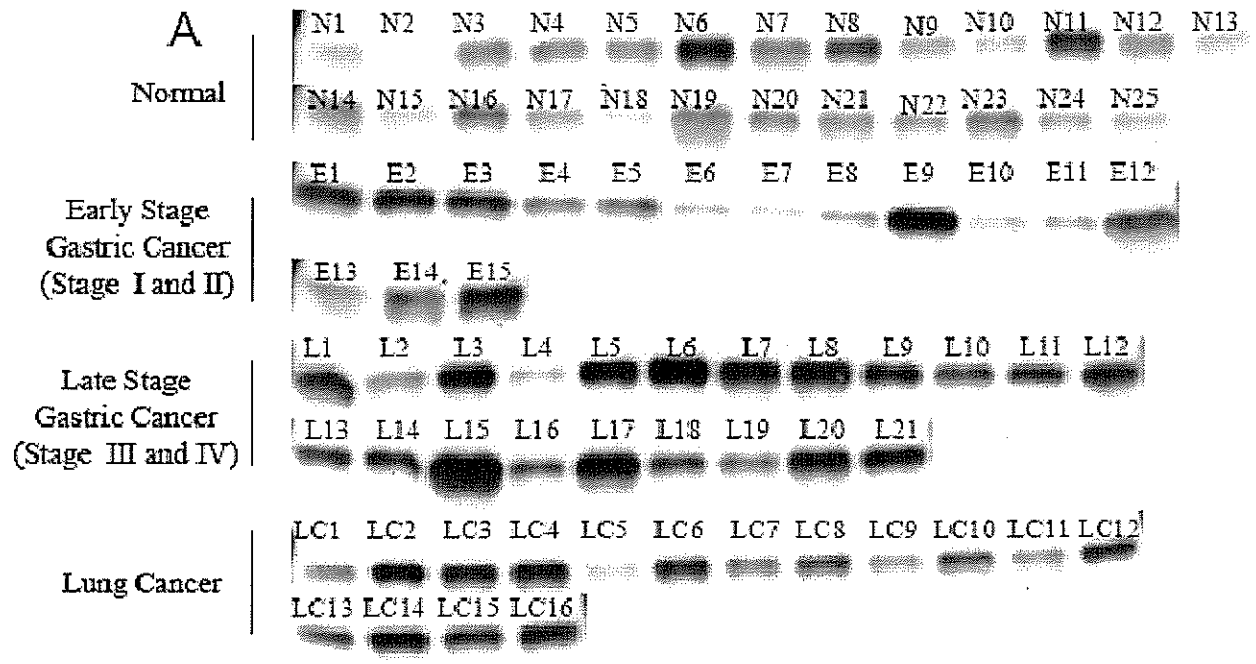

A
Normal
N1 N2 N3 N4 N5 N6 N7 N8 N9 N10 N11 N12 N13
N14 N15 N16 N17 N18 N19 N20 N21 N22 N23 N24 N25
Early Stage Gastric Cancer (Stage I and II)
E1 E2 E3 E4 E5 E6 E7 E8 E9 E10 E11 E12
E13 E14 E15
Late Stage Gastric Cancer (Stage III and IV)
L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11 L12
L13 L14 L15 L16 L17 L18 L19 L20 L21
Lung Cancer
LC1 LC2 LC3 LC4 LC5 LC6 LC7 LC8 LC9 LC10 LC11 LC12
LC13 LC14 LC15 LC16

Figure 3B

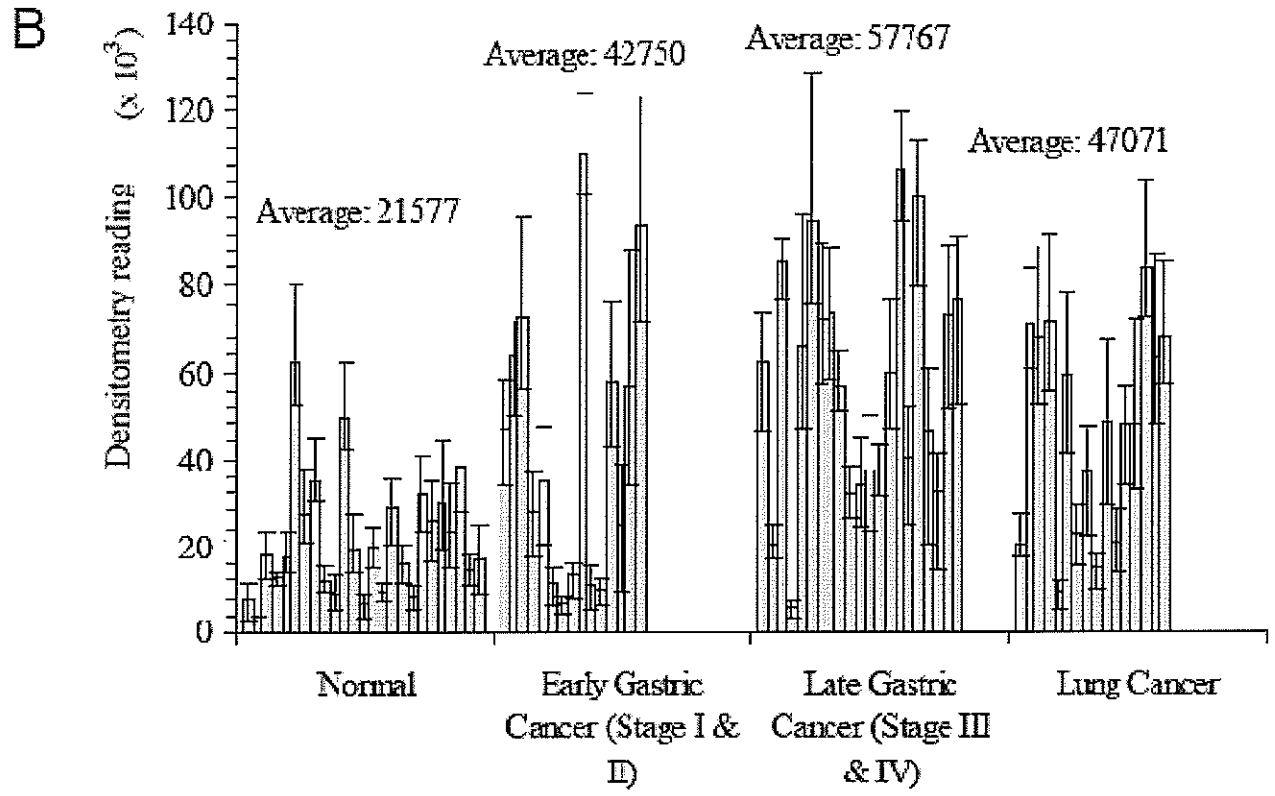

B
Densitometry reading (x 10^3)
140
120
100
80
60
40
20
0
Average: 21577
Average: 42750
Average: 57767
Average: 47071
Normal
Early Gastric Cancer (Stage I & II)
Late Gastric Cancer (Stage III & IV)
Lung Cancer

Figure 3C

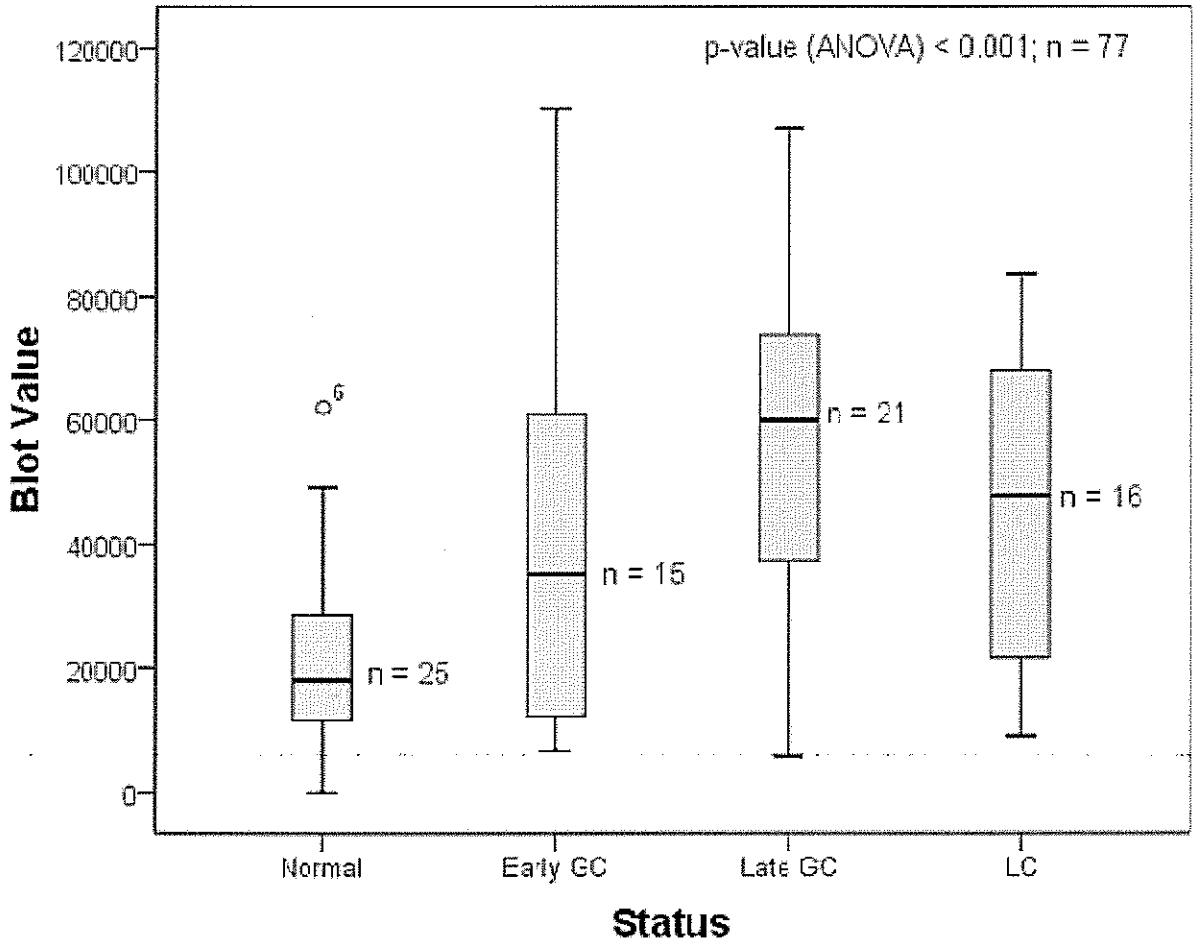

p-value (ANOVA) < 0.001; n = 77
Blot Value
120000
100000
80000
60000
40000
20000
0
n = 25
n = 15
n = 21
n = 16
Normal
Early GC
Late GC
LC
Status

Figure 4

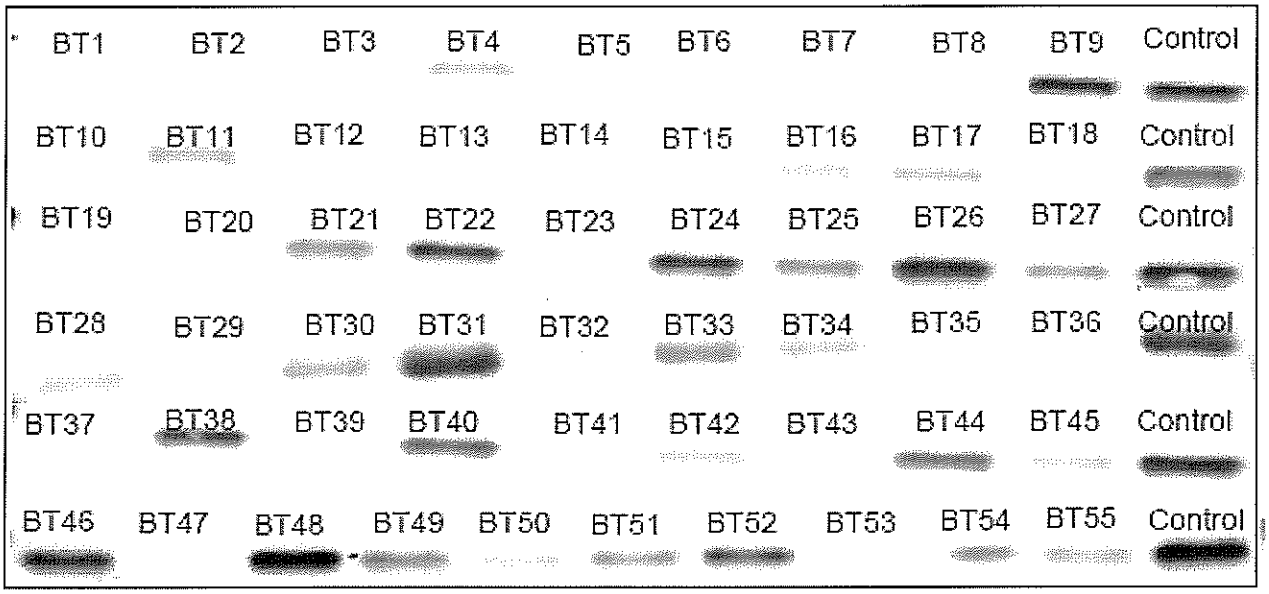
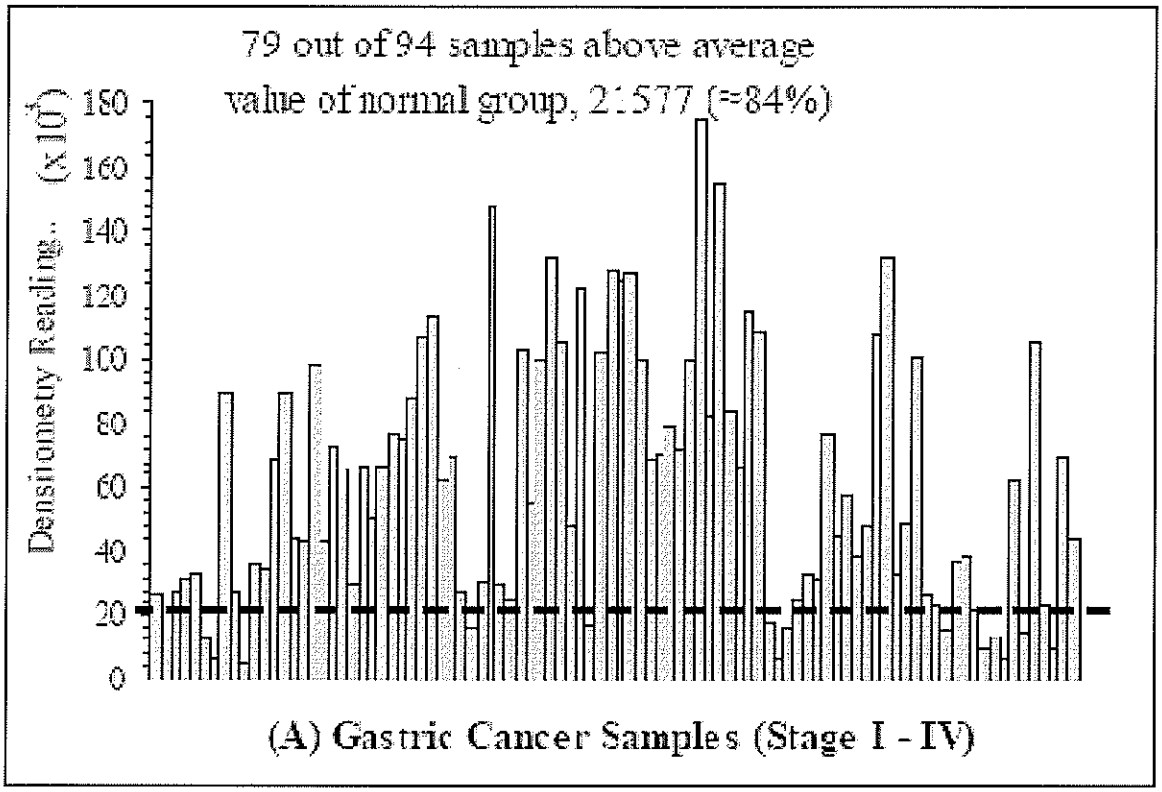


Figure 5

Figure 5


79 out of 94 samples above average value of normal group, 21577 (≈84%)
Densitometry Reading.. (x 10³)
180
160
140
120
100
80
60
40
20
0
(A) Gastric Cancer Samples (Stage I - IV)

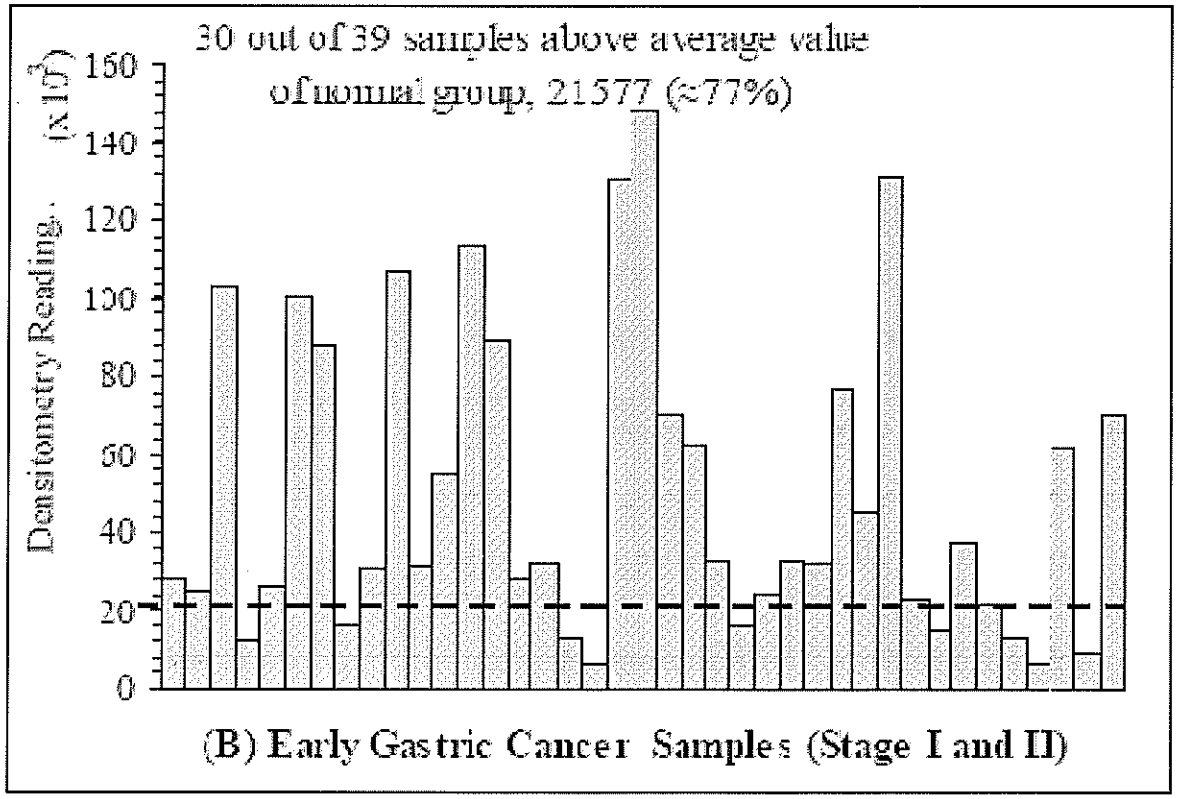
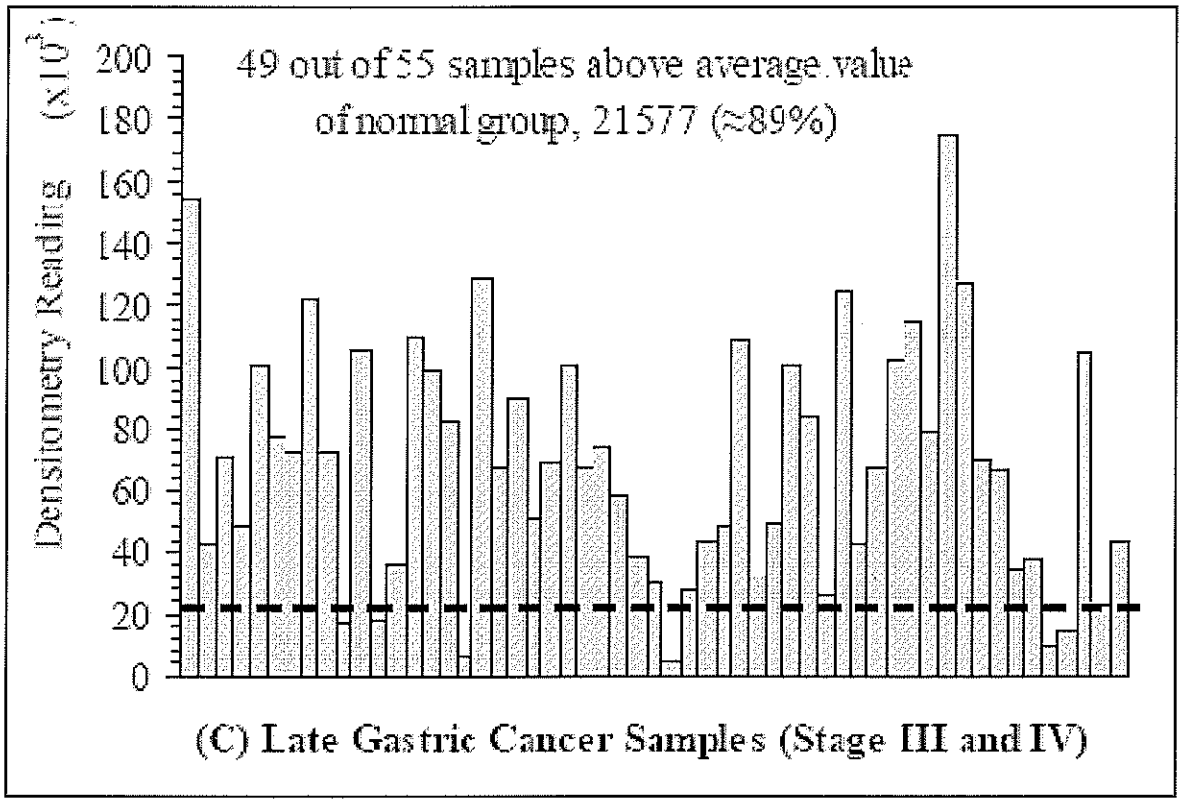

30 out of 39 samples above average value of normal group, 21577 (≈77%)
Densitometry Reading.. (x 10³)
160
140
120
100
80
60
40
20
0
(B) Early Gastric Cancer Samples (Stage I and II)

Figure 5


49 out of 55 samples above average value of normal group, 21577 (≈89%)
Densitometry Reading (x10³)
200
180
160
140
120
100
80
60
40
20
0
(C) Late Gastric Cancer Samples (Stage III and IV)

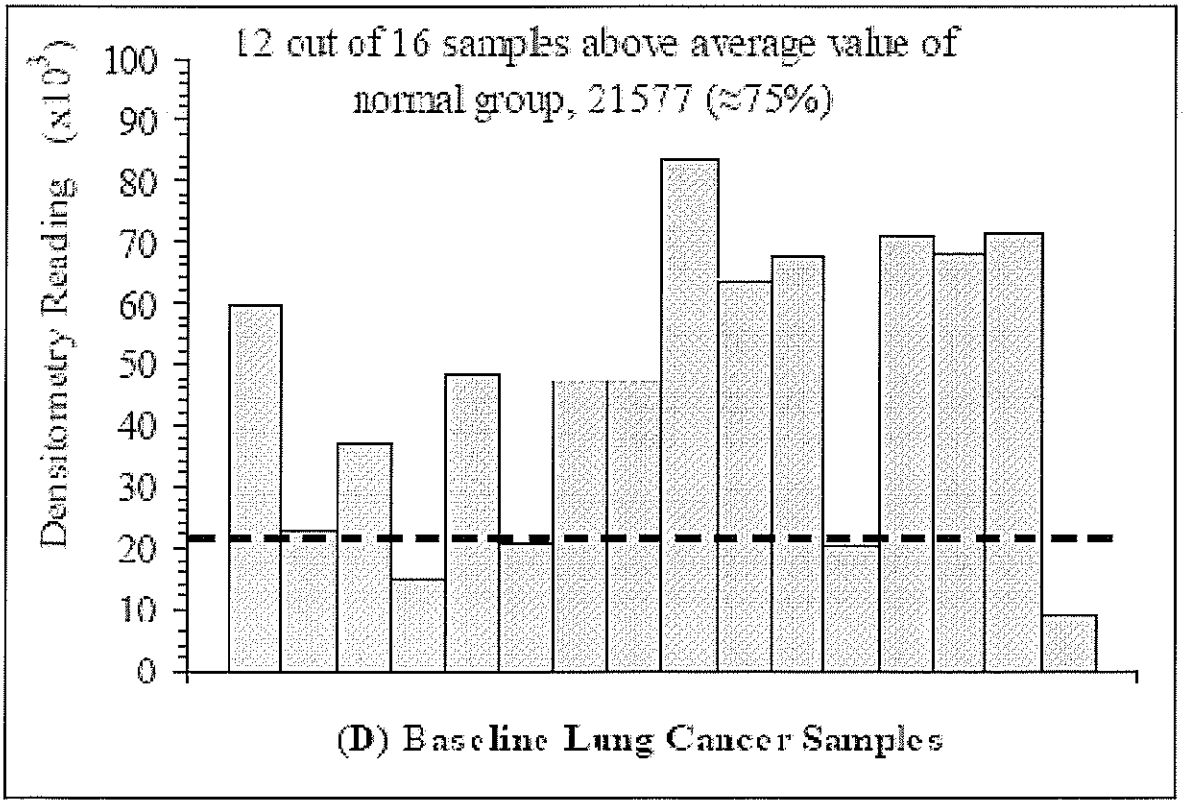

12 out of 16 samples above average value of normal group, 21577 (≈75%)
Densitometry Reading (x10³)
100
90
80
70
60
50
40
30
20
10
0
(D) Baseline Lung Cancer Samples

Figure 5E

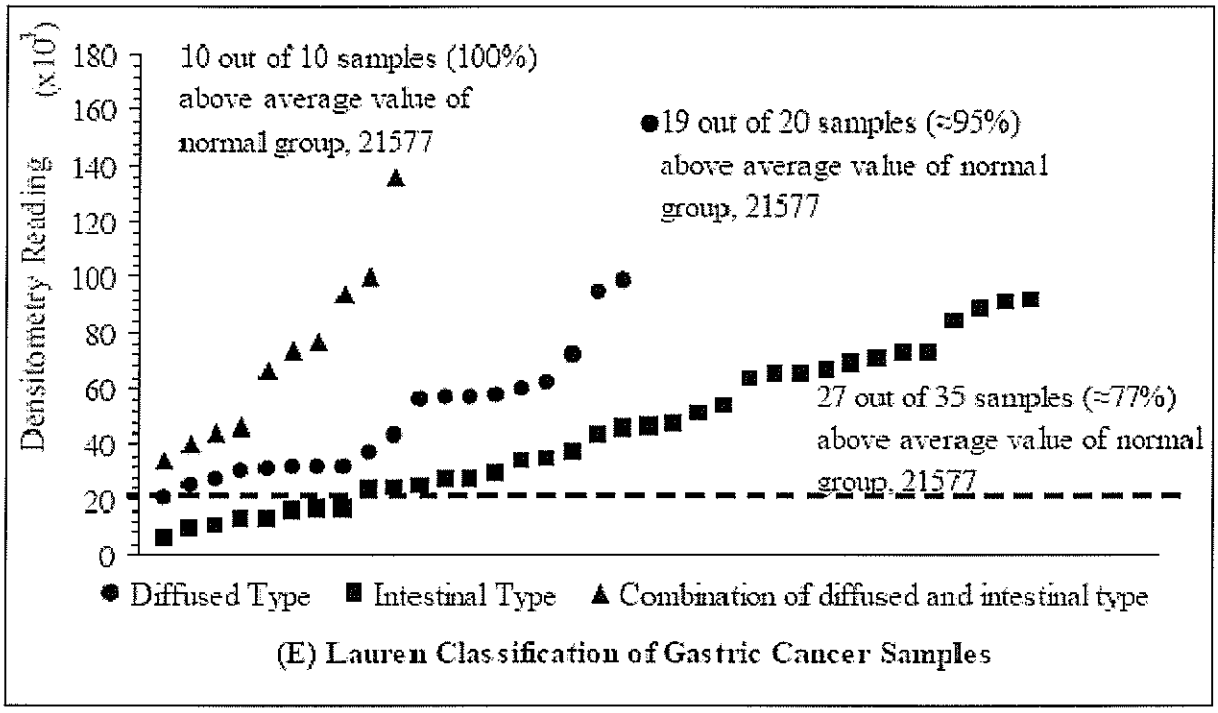


Figure 6A

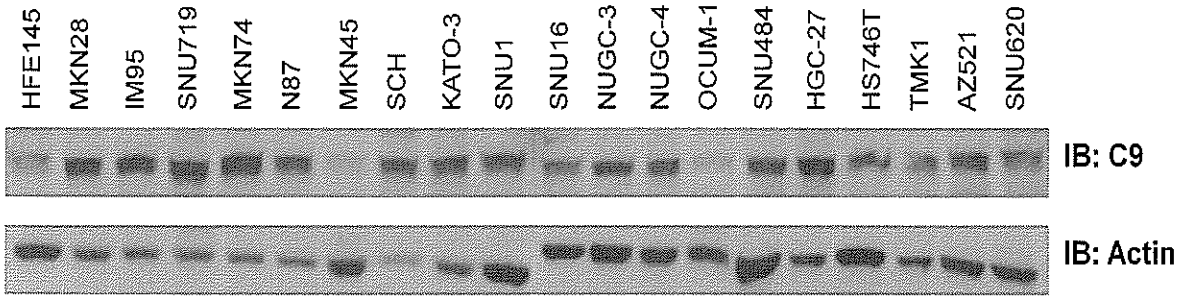


Figure 6B

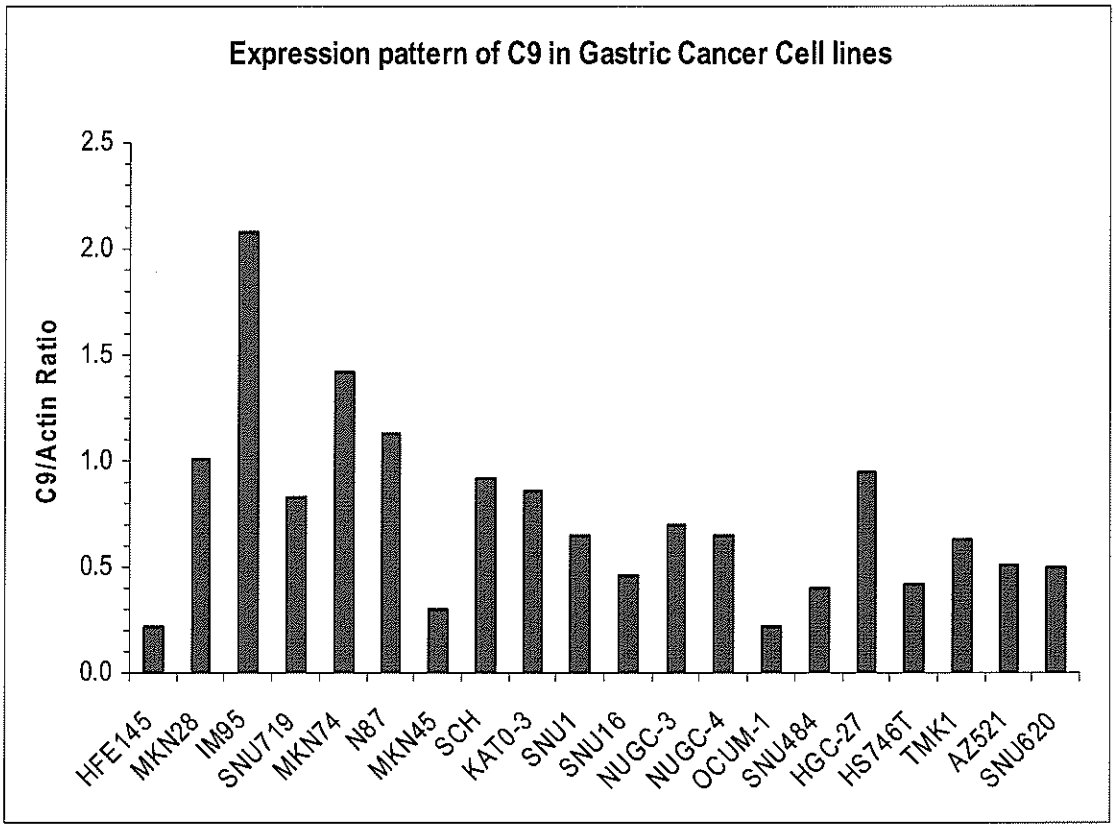


Figure 6C

