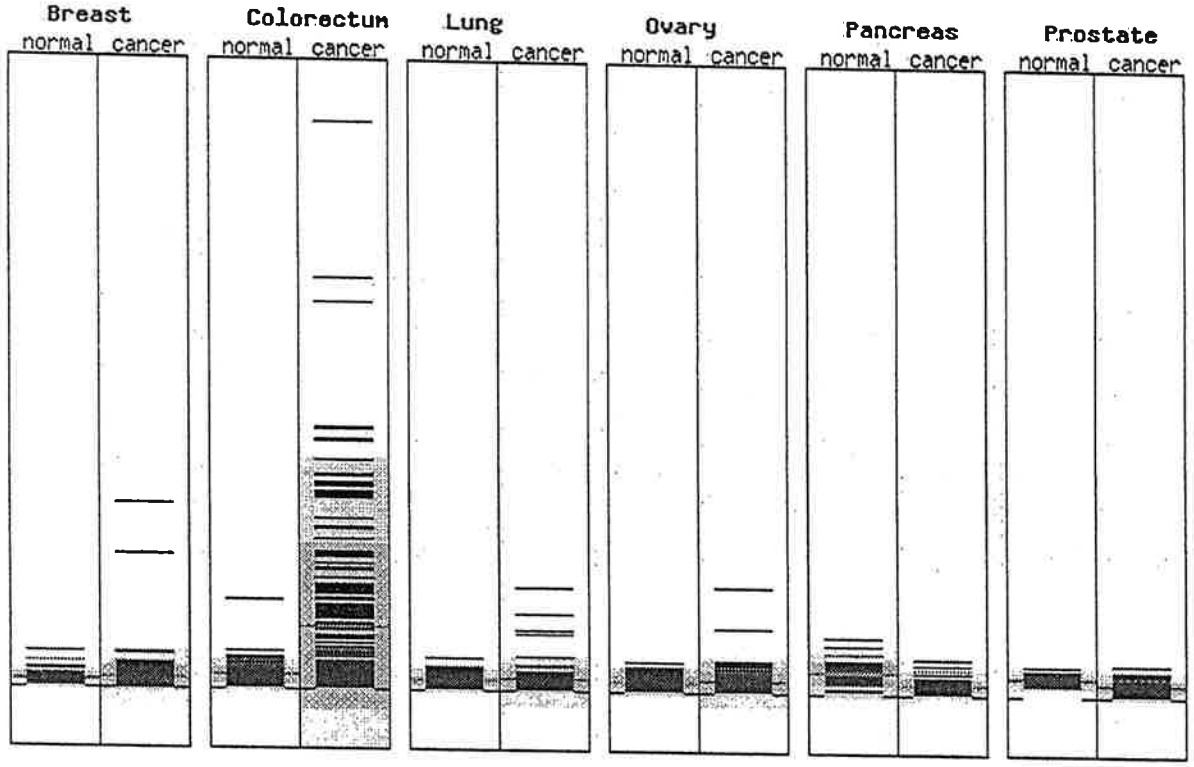
FIG. 1



Breast cancer		Colorectum cancer		Lung cancer		Ovary cancer		Pancreatic cancer		Prostate cancer	
SD1%	SD2%	SD1%	SD2%	SD1%	SD2%	SD1%	SD2%	SD1%	SD2%	SD1%	SD2%
17.7	6.7	52.0	44.6	19.1	6.6	20.8	8.5	2.0	0.0	5.7	1.4

FIG. 2A

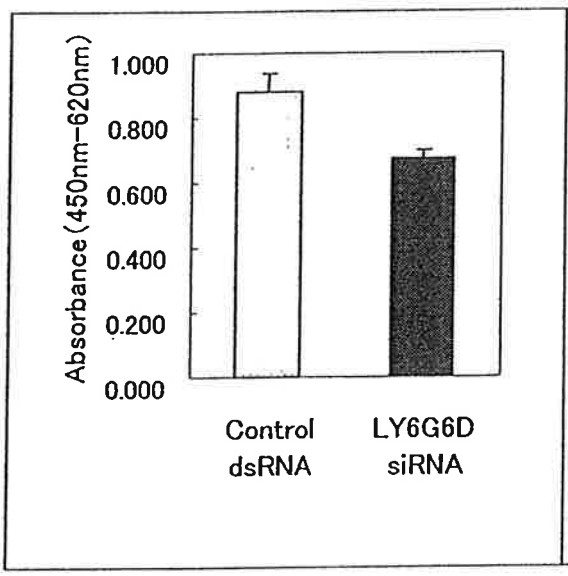


FIG. 2B

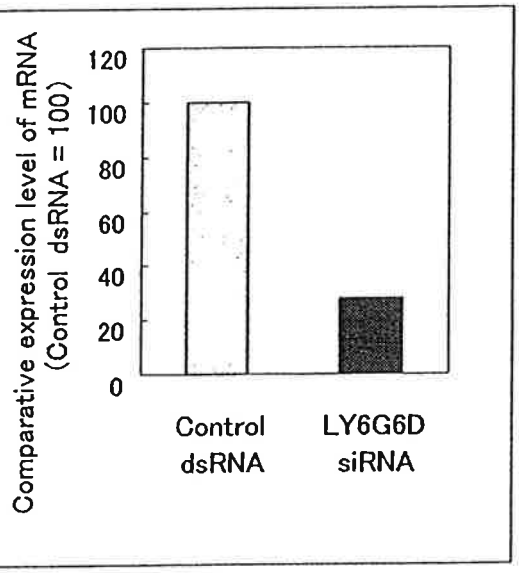


FIG. 3A

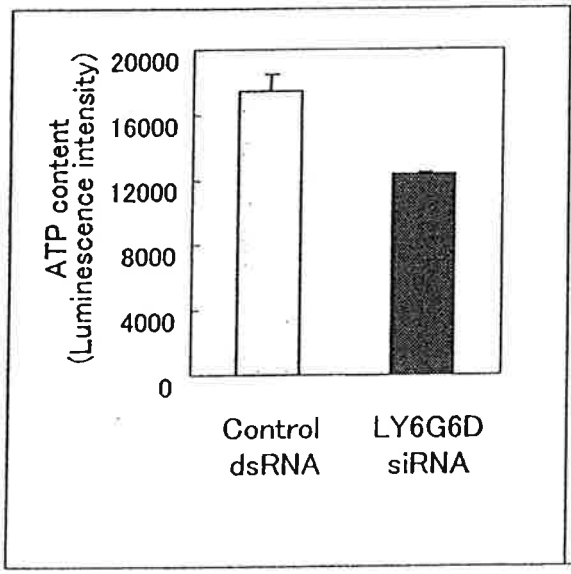


FIG. 3B

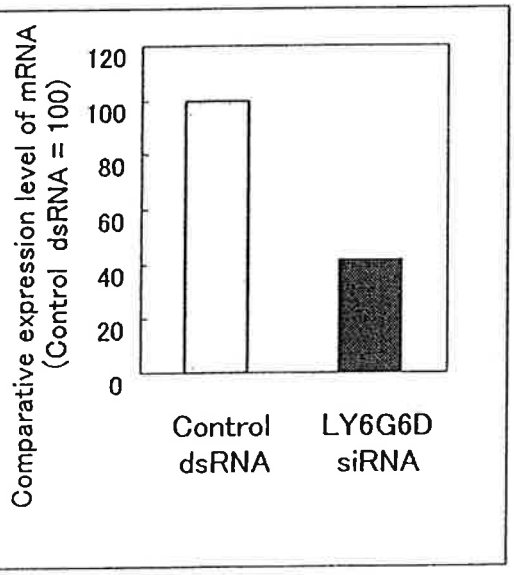


FIG. 4A

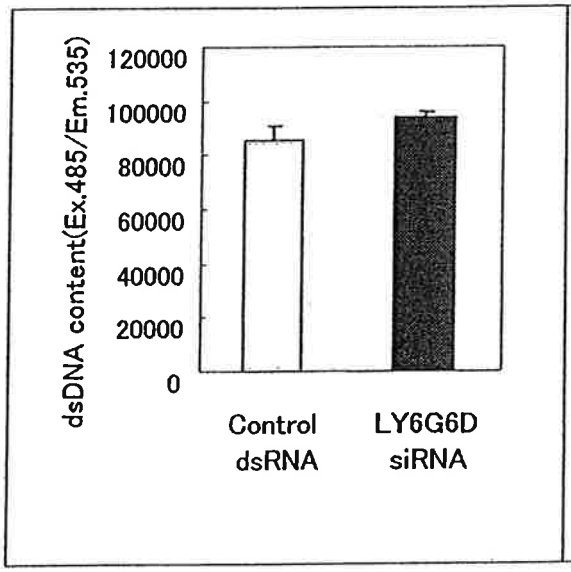

dsDNA content(Ex.485/Em.535)
120000
100000
80000
60000
40000
20000
0
Control dsRNA
LY6G6D siRNA

FIG. 4B

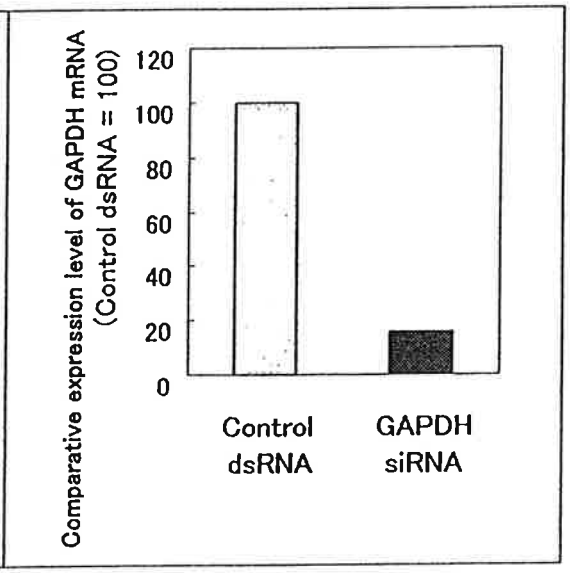

Comparative expression level of GAPDH mRNA (Control dsRNA = 100)
120
100
80
60
40
20
0
Control dsRNA
GAPDH siRNA

FIG. 5A

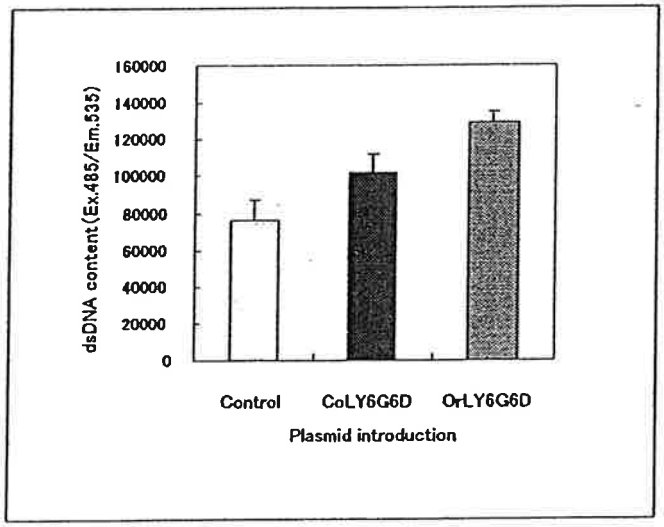

160000
140000
120000
100000
80000
60000
40000
20000
0
dsDNA content (Ex.485/Em.535)
Control
CoLY6G6D
OrLY6G6D
Plasmid introduction

FIG. 5B

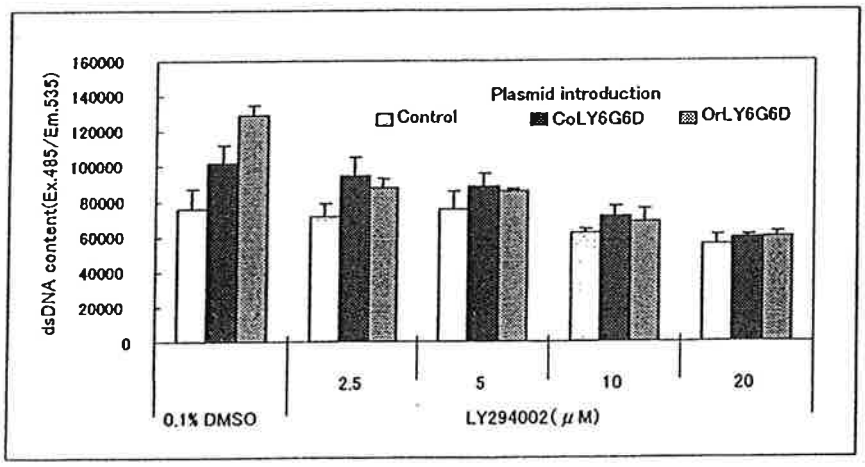

160000
140000
120000
100000
80000
60000
40000
20000
0
dsDNA content(Ex.485/Em.535)
Plasmid introduction
Control
CoLY6G6D
OrLY6G6D
0.1% DMSO
2.5
5
10
20
LY294002(μM)

FIG. 5C

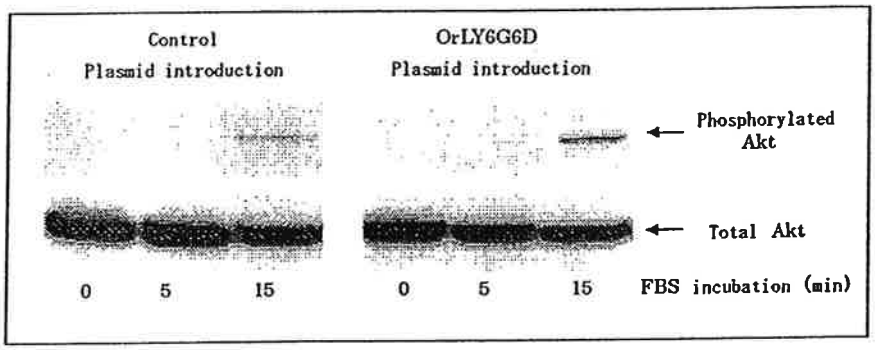

Control
Plasmid introduction
OrLY6G6D
Plasmid introduction
Phosphorylated Akt
Total Akt
0
5
15
0
5
15
FBS incubation (min)

FIG. 6A

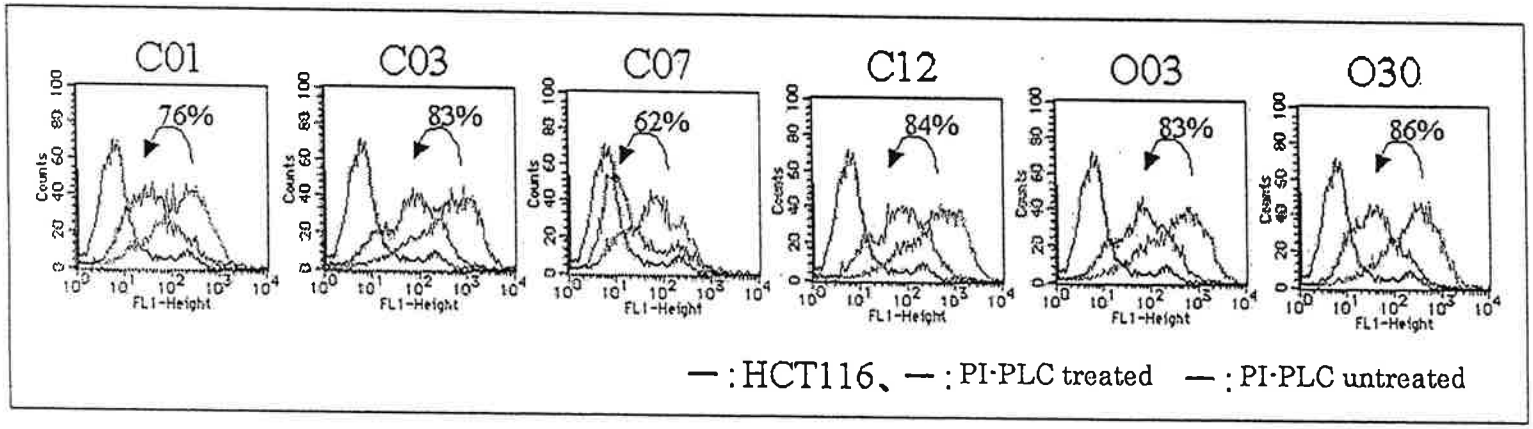

C01
76%
C03
83%
C07
62%
C12
84%
O03
83%
O30
86%
Counts
FL1-Height
—: HCT116、—: PI-PLC treated —: PI-PLC untreated

FIG. 6B

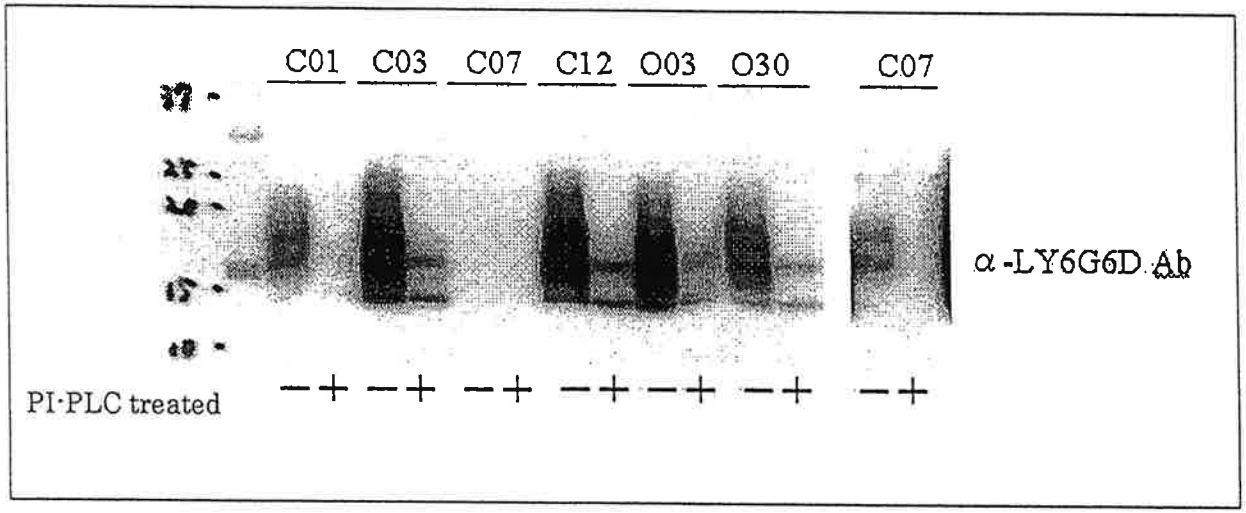

C01
C03
C07
C12
O03
O30
C07
α-LY6G6D Ab
PI-PLC treated
− + − + − + − + − + − + − +

FIG. 7

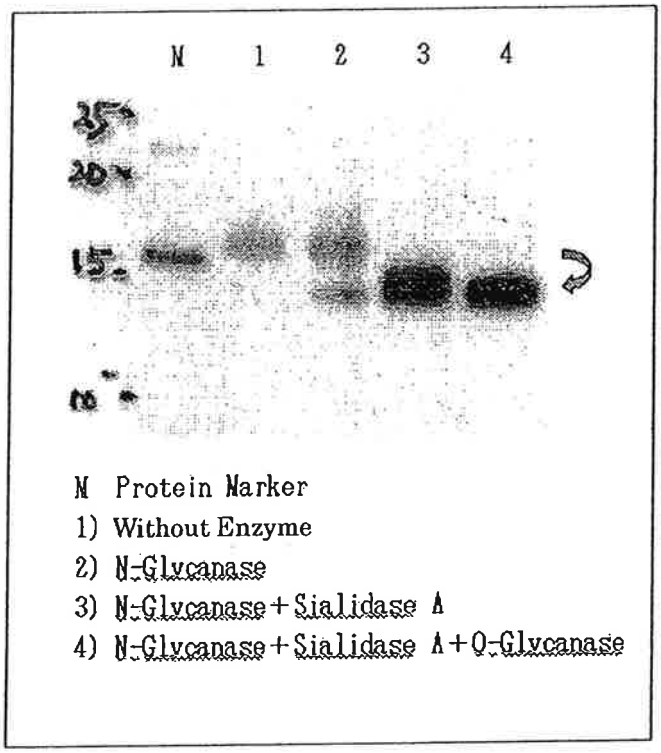

N 1 2 3 4
25
20
15
10
N Protein Marker
1) Without Enzyme
2) N-Glycanase
3) N-Glycanase+Sialidase A
4) N-Glycanase+Sialidase A+O-Glycanase

FIG. 8

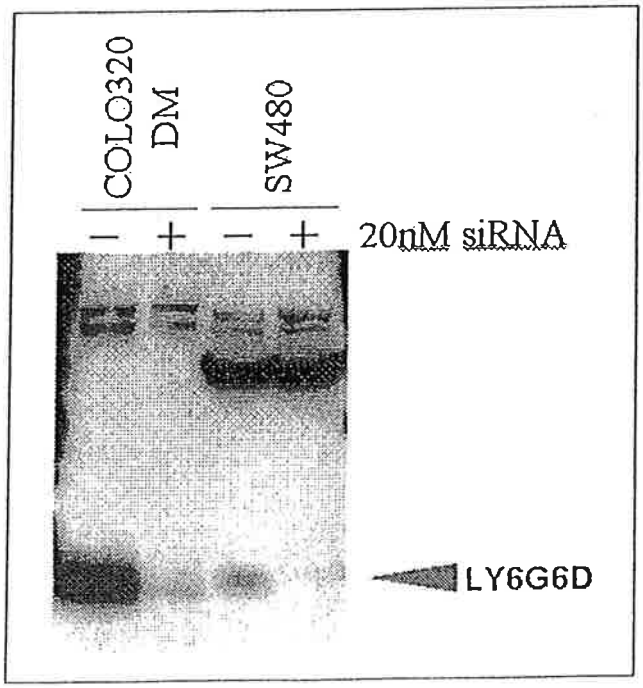

COLO320 DM
SW480
− + − +
20nM siRNA
LY6G6D

FIG. 9

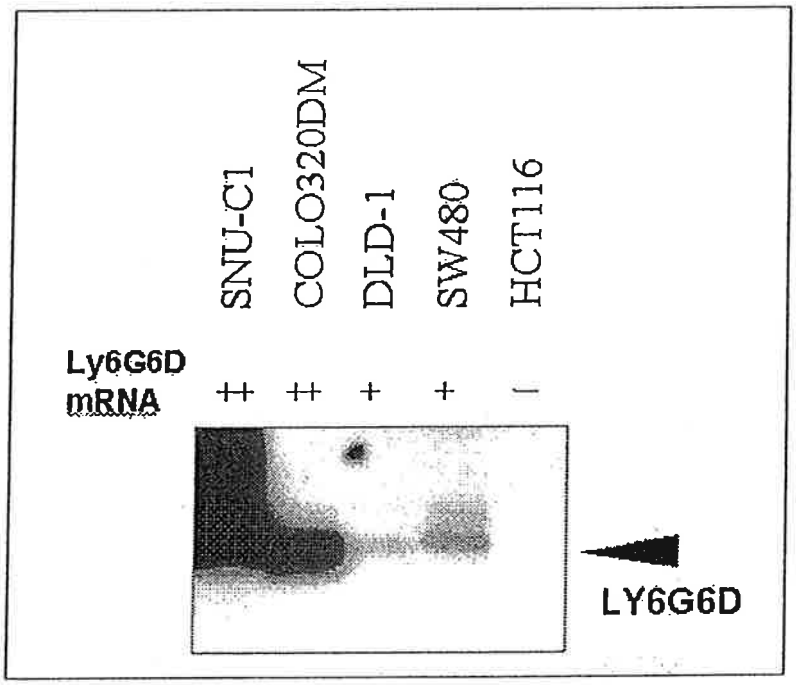

SNU-C1
COLO320DM
DLD-1
SW480
HCT116
Ly6G6D mRNA
++
++
+
+
−
LY6G6D

FIG. 10

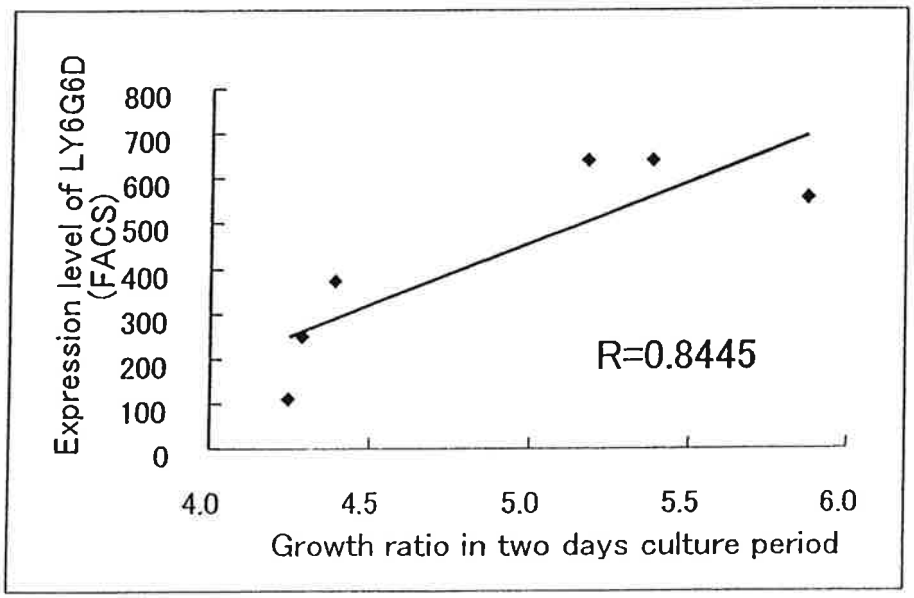

Expression level of LY6G6D (FACS)
800
700
600
500
400
300
200
100
0
4.0
4.5
5.0
5.5
6.0
Growth ratio in two days culture period
R=0.8445

FIG. 11

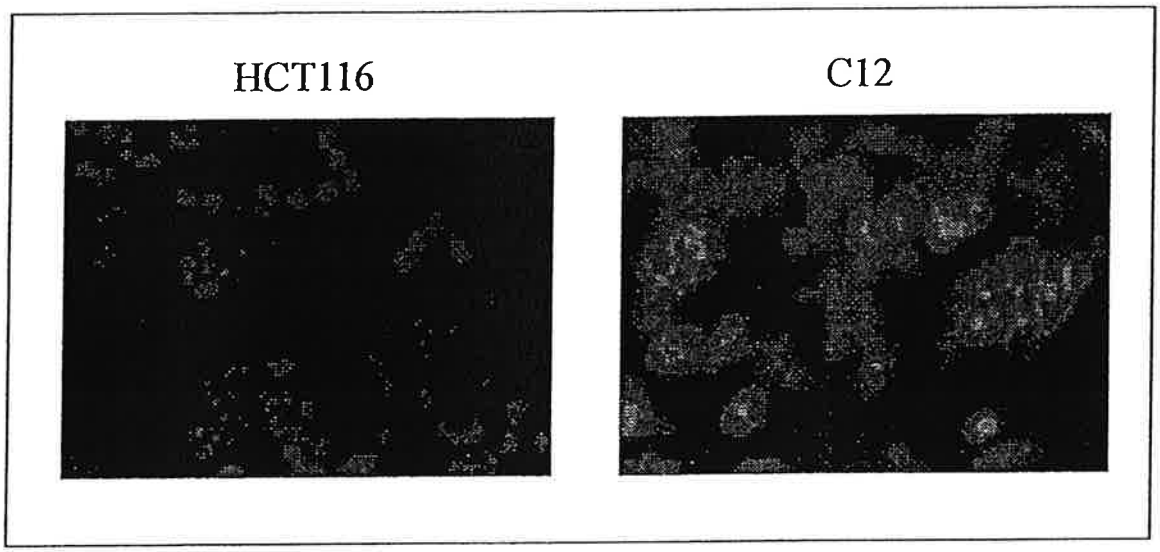

HCT116
C12

FIG. 12

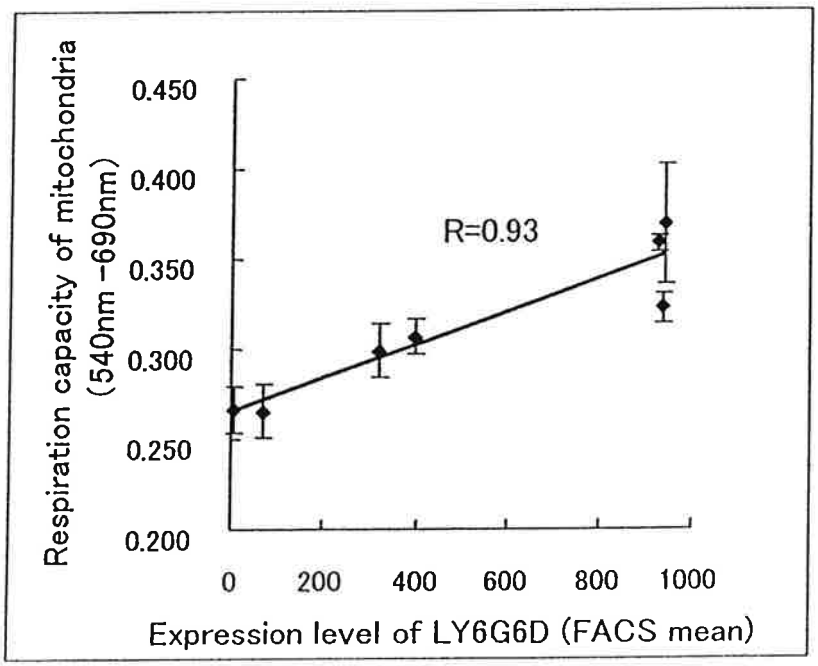

Respiration capacity of mitochondria (540nm -690nm)
0.450
0.400
0.350
0.300
0.250
0.200
R=0.93
0
200
400
600
800
1000
Expression level of LY6G6D (FACS mean)

FIG. 13

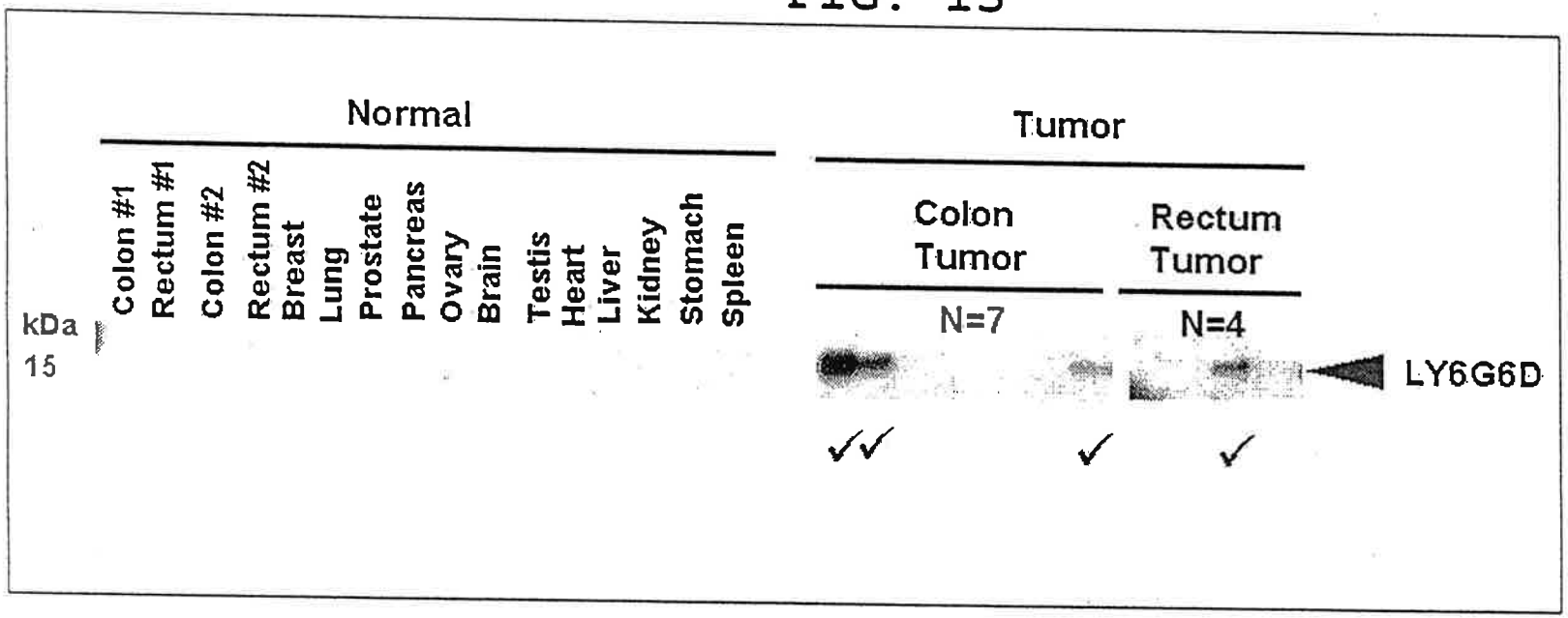
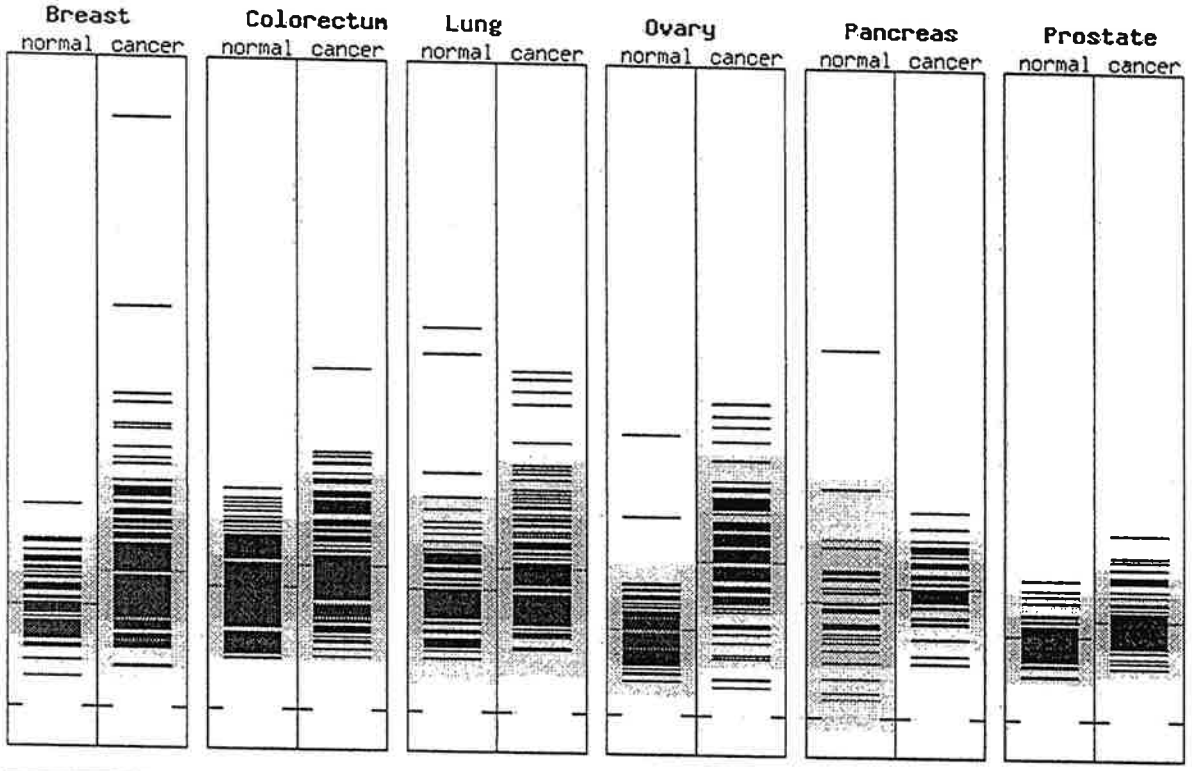

Normal
Tumor
Colon #1
Rectum #1
Colon #2
Rectum #2
Breast
Lung
Prostate
Pancreas
Ovary
Brain
Testis
Heart
Liver
Kidney
Stomach
Spleen
Colon Tumor
Rectum Tumor
N=7
N=4
kDa
15
LY6G6D
✓✓
✓
✓

FIG. 14



Breast cancer		Colorectum cancer		Lung cancer		Ovary cancer		Pancreatic cancer		Prostate cancer	
SD1%	SD2%	SD1%	SD2%	SD1%	SD2%	SD1%	SD2%	SD1%	SD2%	SD1%	SD2%
42.0	17.3	33.3	18.6	22.1	9.6	74.5	51.9	4.0	0.0	27.7	14.3

FIG. 15

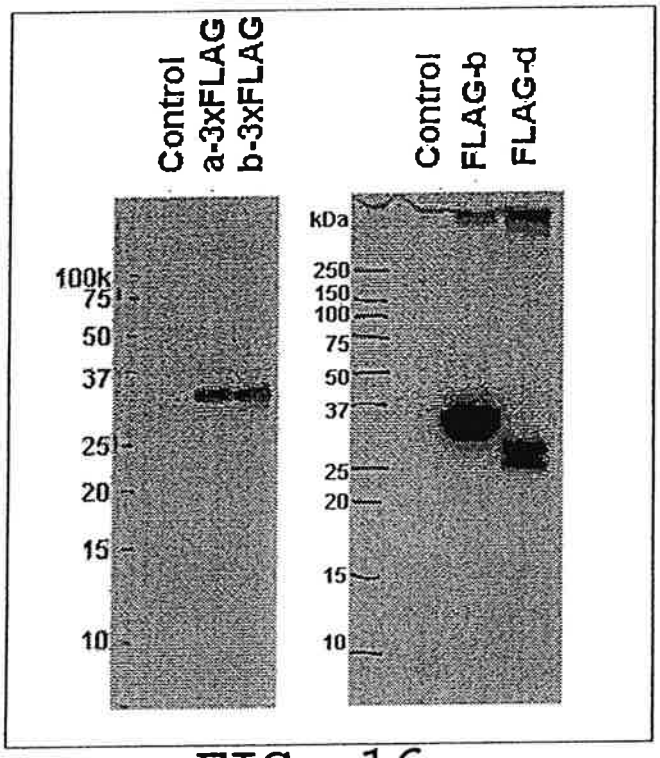

Control
a-3xFLAG
b-3xFLAG
Control
FLAG-b
FLAG-d
kDa
100k
75
50
37
25
20
15
10
kDa
250
150
100
75
50
37
25
20
15
10

FIG. 16

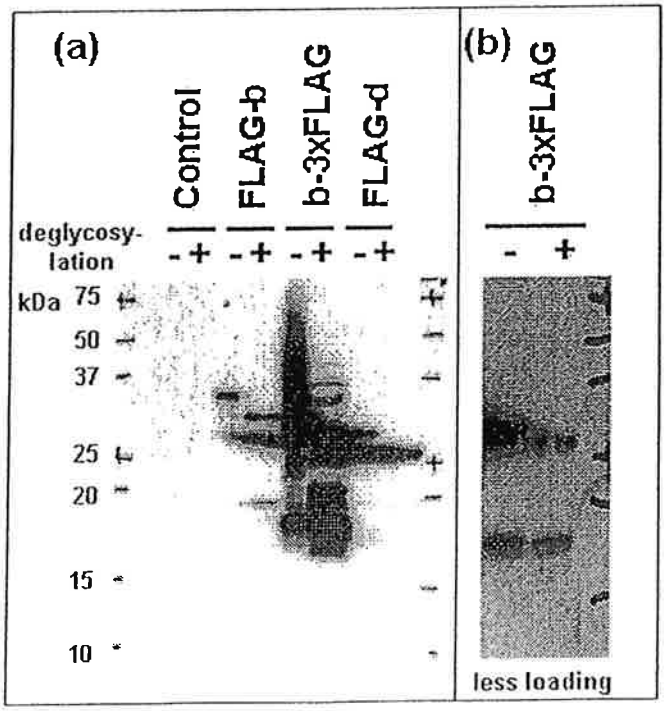

(a)
Control
FLAG-b
b-3xFLAG
FLAG-d
deglycosy-
lation
- + - + - + - +
kDa
75
50
37
25
20
15
10
(b)
b-3xFLAG
- +
less loading

FIG. 17

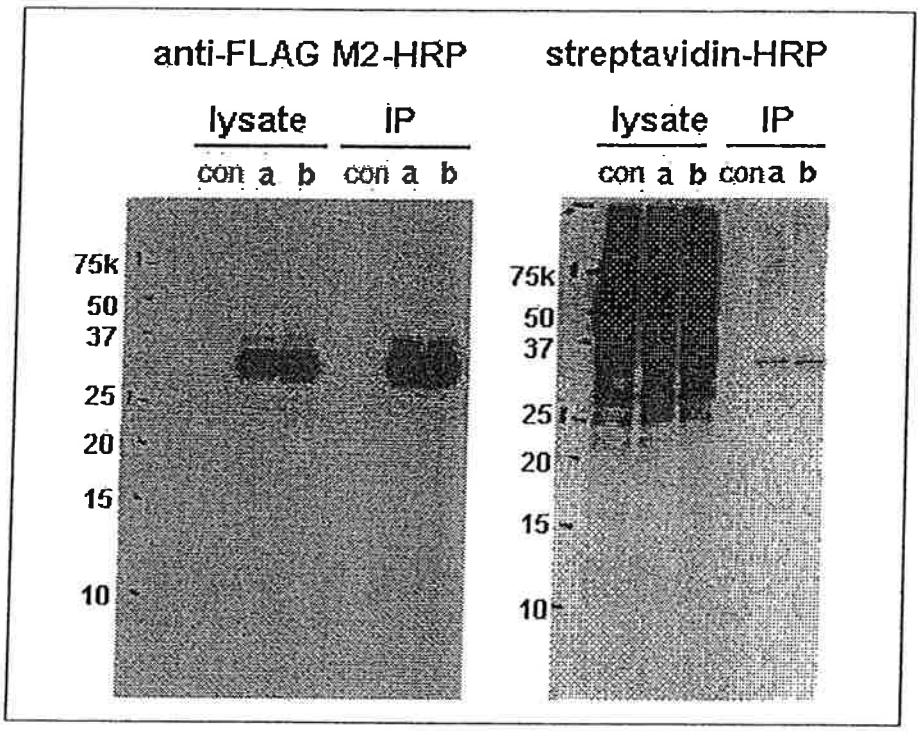
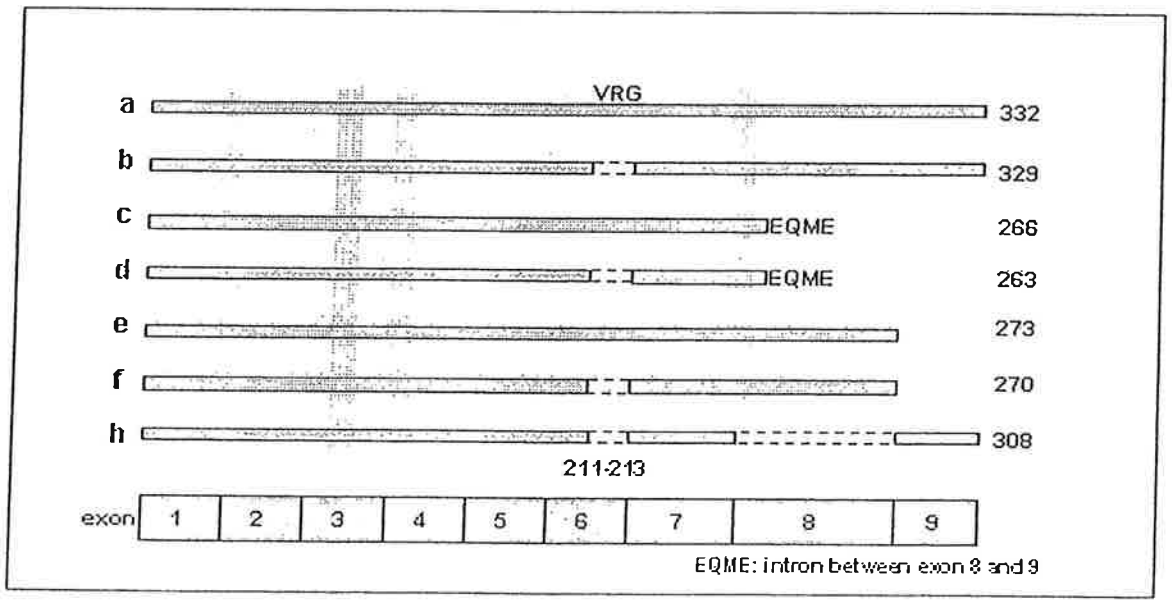

anti-FLAG M2-HRP
streptavidin-HRP
lysate
IP
lysate
IP
con a b con a b
con a b con a b
75k
50
37
25
20
15
10
75k
50
37
25
20
15
10

FIG. 18


a
b
c
d
e
f
h
VRG
EQME
EQME
332
329
266
263
273
270
308
211-213
exon
1
2
3
4
5
6
7
8
9
EQME: intron between exon 8 and 9