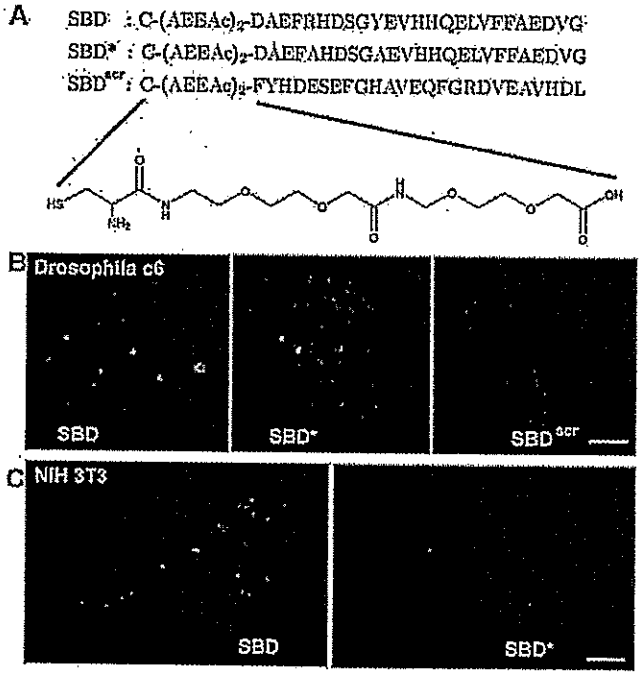

A
SBD : C-(AEEAc)2-DAEFRHDSGYEVHHQELVFFAEDVG
SBD* : C-(AEEAc)2-DAEFAHDSGAEVHHQELVFFAEDVG
SBDscr : C-(AEEAc)2-FYHDESEFGHAVEQFGRDVEAVHDL
B
Drosophila c6
SBD
SBD*
SBDscr
C
NIH 3T3
SBD
SBD*

FIGURE 1

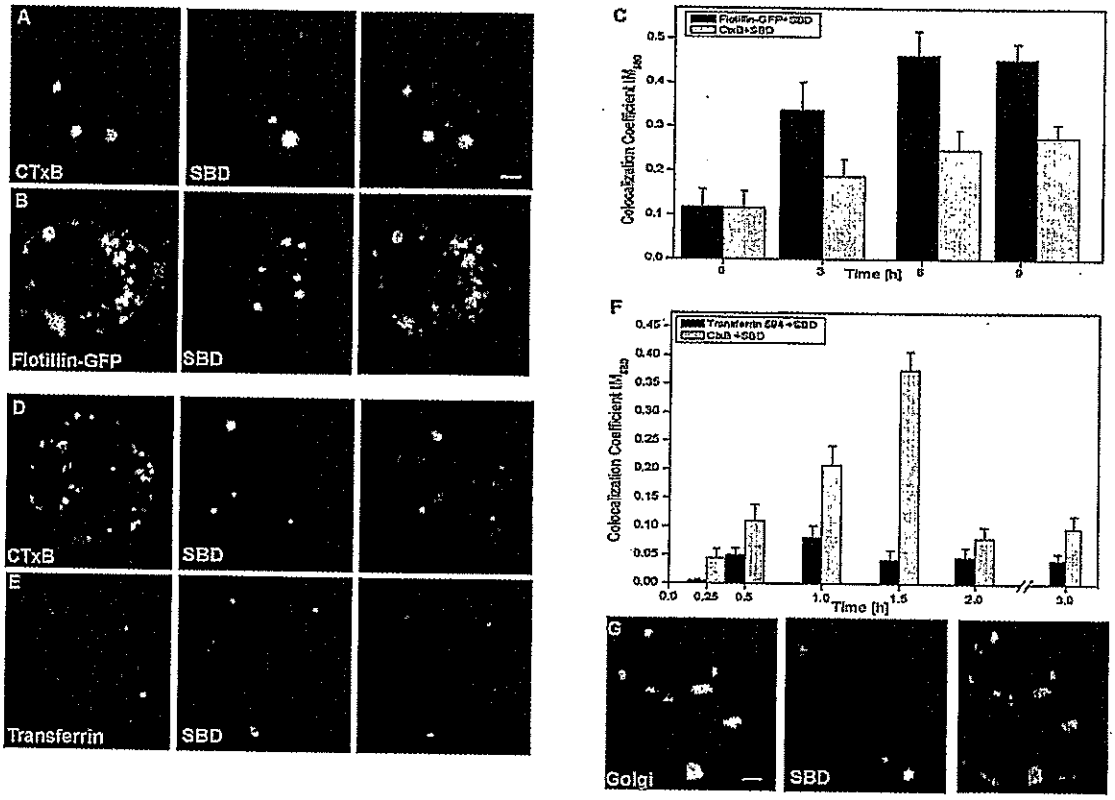

A
CTxB
SBD
B
Flotillin-GFP
SBD
C
Flotillin-GFP+SBD
CtxB+SBD
Colocalization Coefficient M1
Time [h]
D
CTxB
SBD
E
Transferrin
SBD
F
Transferrin 594+SBD
CtxB+SBD
Colocalization Coefficient M2
Time [h]
G
Golgi
SBD

FIGURE 2

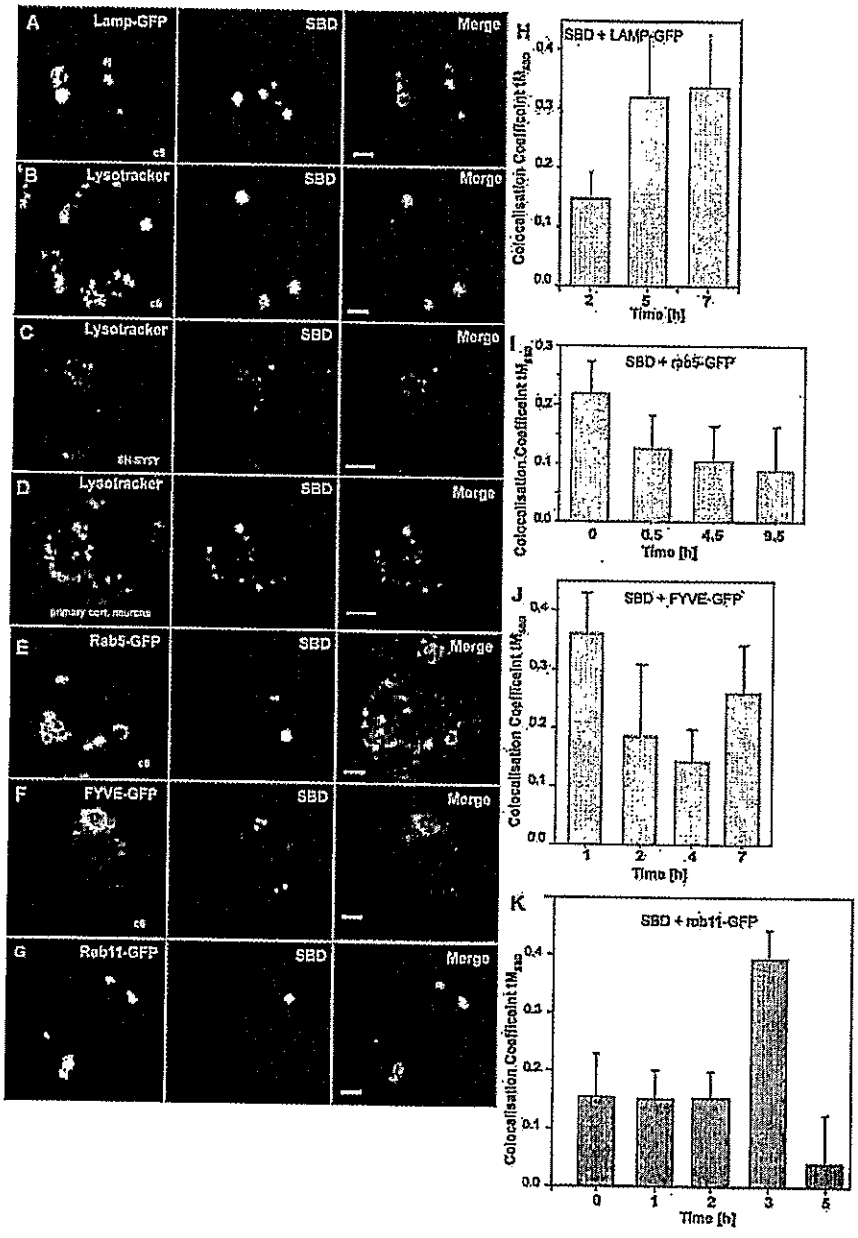

A
Lamp-GFP
SBD
Merge
B
Lysotracker
SBD
Merge
C
Lysotracker
SBD
Merge
D
Lysotracker
SBD
Merge
E
Rab5-GFP
SBD
Merge
F
FYVE-GFP
SBD
Merge
G
Rab11-GFP
SBD
Merge
H
SBD + LAMP-GFP
Colocalisation Coefficient tM2
Time [h]
I
SBD + rab5-GFP
Colocalisation Coefficient tM2
Time [h]
J
SBD + FYVE-GFP
Colocalisation Coefficient tM2
Time [h]
K
SBD + rab11-GFP
Colocalisation Coefficient tM2
Time [h]

FIGURE 3

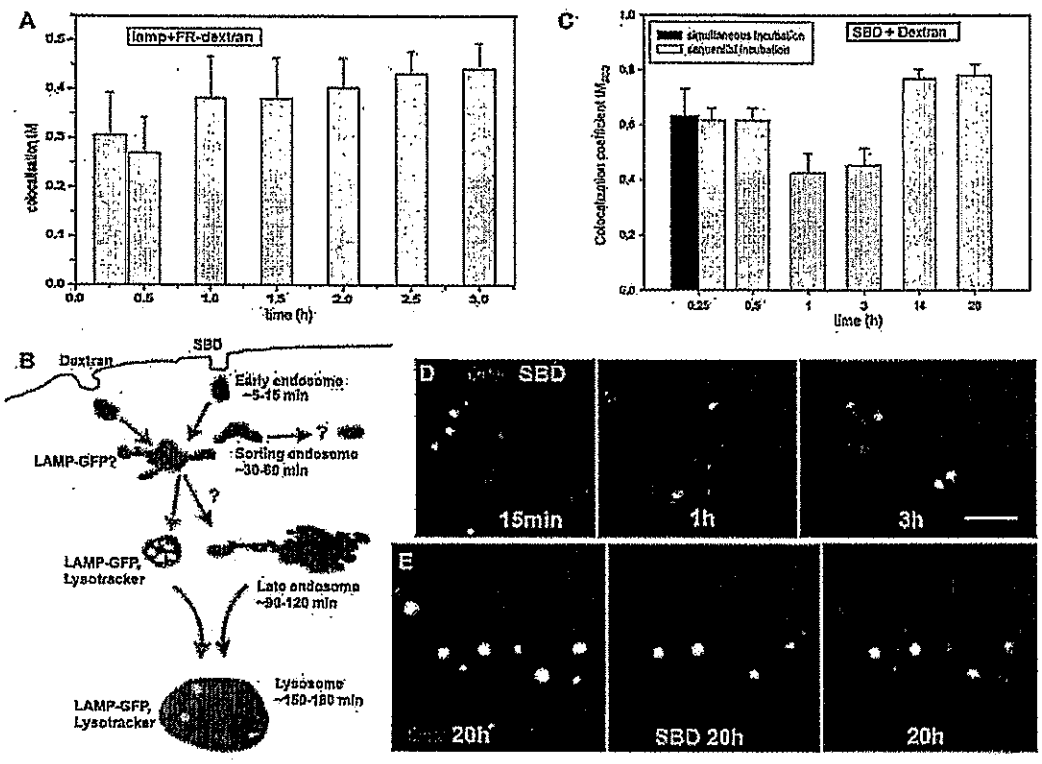

A
lamp+FR-dextran
colocalisation M
time (h)
C
simultaneous incubation
sequential incubation
SBD + Dextran
Colocalization coefficient M2
time (h)
B
Dextran
SBD
Early endosome
~5-15 min
LAMP-GFP?
Sorting endosome
~30-60 min
LAMP-GFP,
Lysotracker
Late endosome
~90-120 min
LAMP-GFP,
Lysotracker
Lysosome
~150-180 min
D
SBD
15min
1h
3h
E
20h
SBD 20h
20h

FIGURE 4

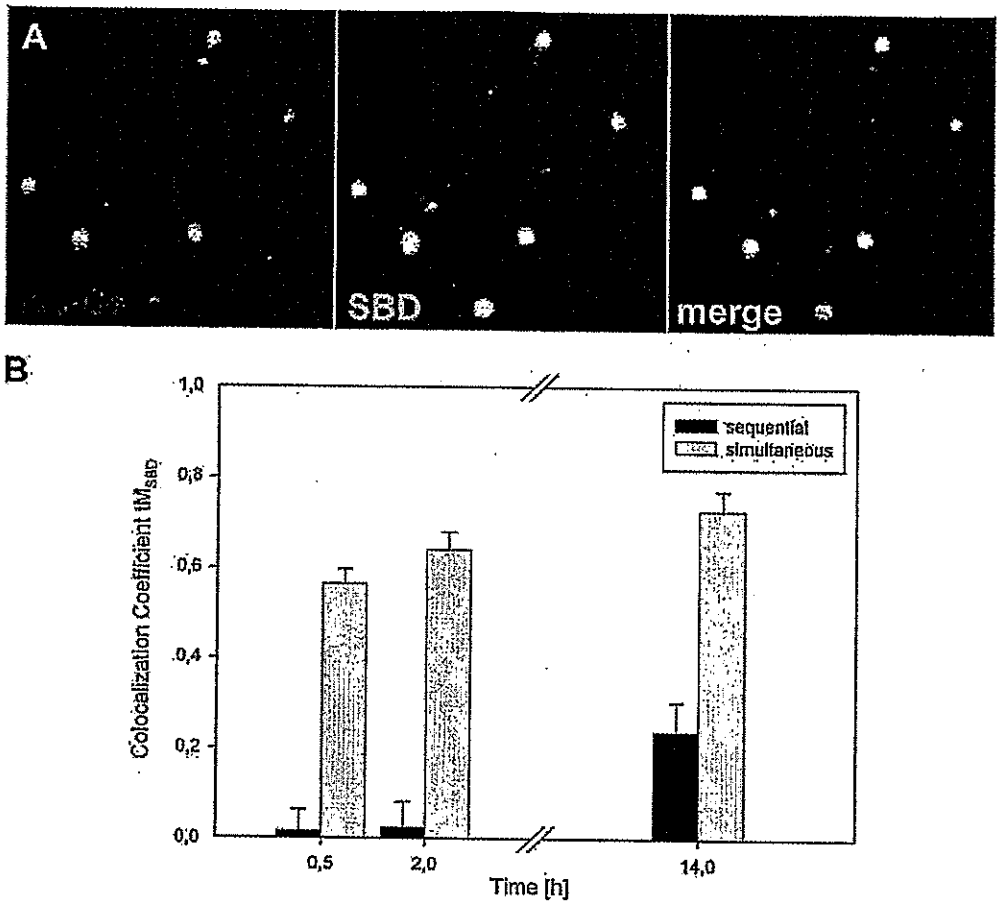

A
SBD
merge
B
Colocalization Coefficient tM$_{sap}$
1,0
0,8
0,6
0,4
0,2
0,0
0,5
2,0
14,0
Time [h]
sequential
simultaneous

FIGURE 5

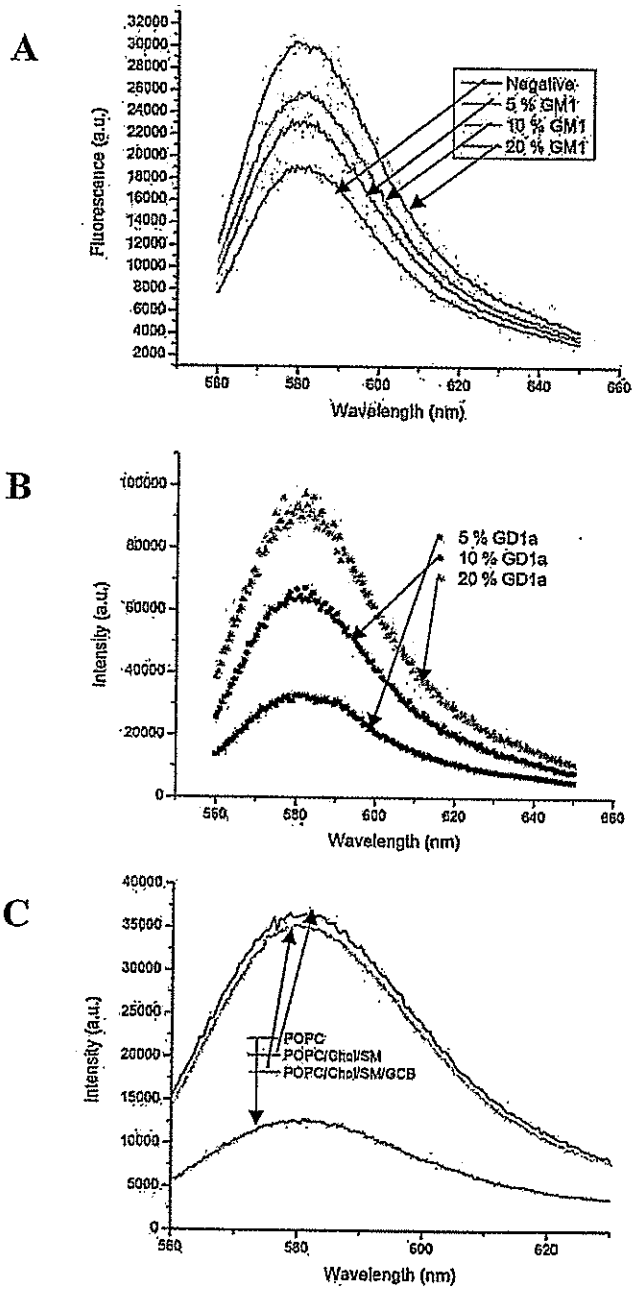

A
Fluorescence (a.u.)
Wavelength (nm)
Negative
5 % GM1
10 % GM1
20 % GM1
B
Intensity (a.u.)
Wavelength (nm)
5 % GD1a
10 % GD1a
20 % GD1a
C
Intensity (a.u.)
Wavelength (nm)
POPC
POPC/Chol/SM
POPC/Chol/SM/GCB

FIGURE 6

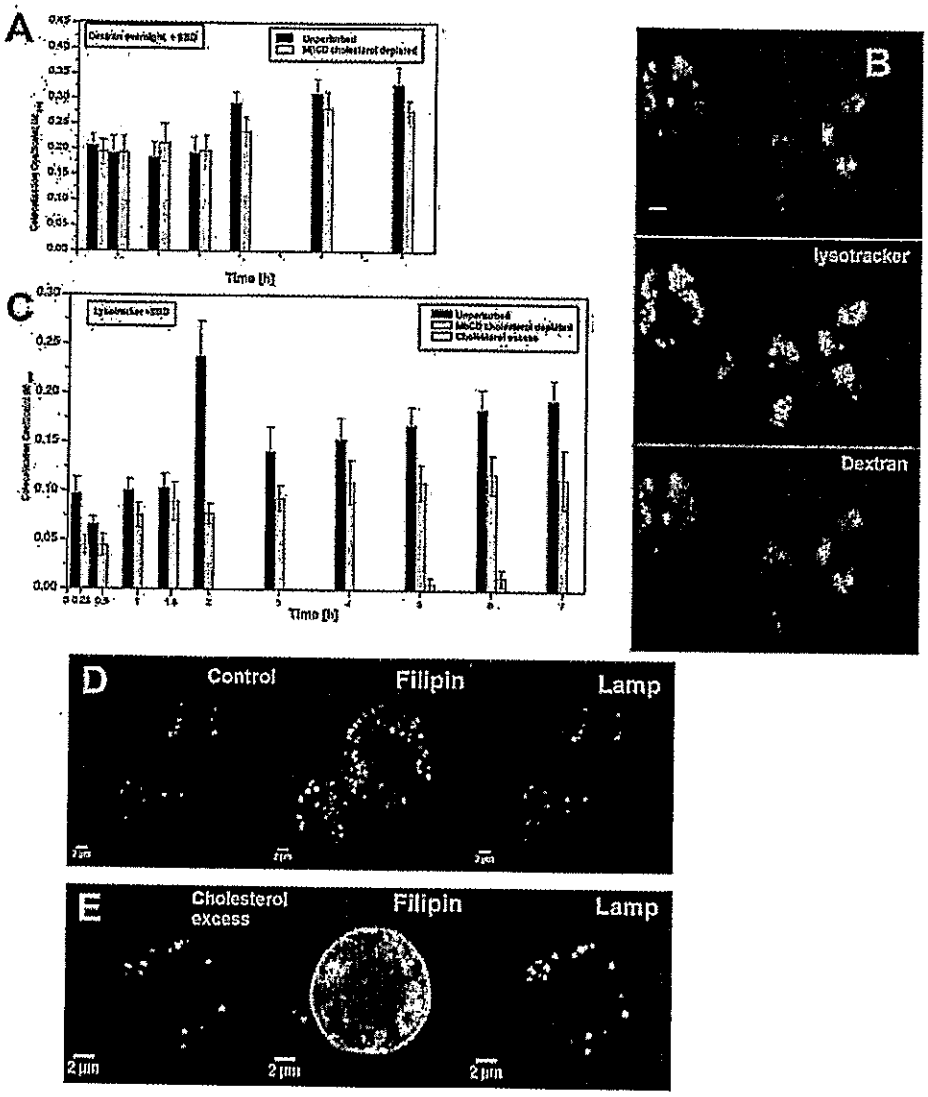

A
Time [h]
B
lysotracker
Dextran
C
Time [h]
D
Control
Filipin
Lamp
E
Cholesterol excess
Filipin
Lamp
2 µm
2 µm
2 µm

FIGURE 7

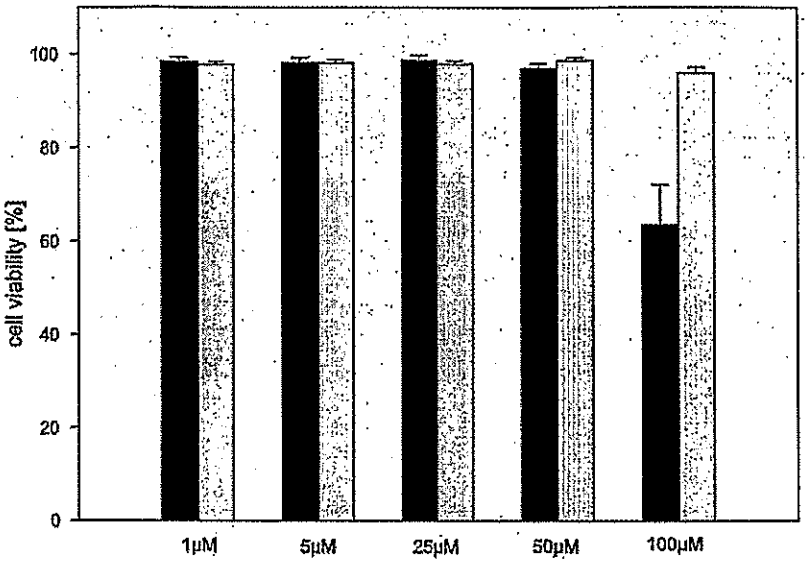


FIGURE 8



FIGURE 9

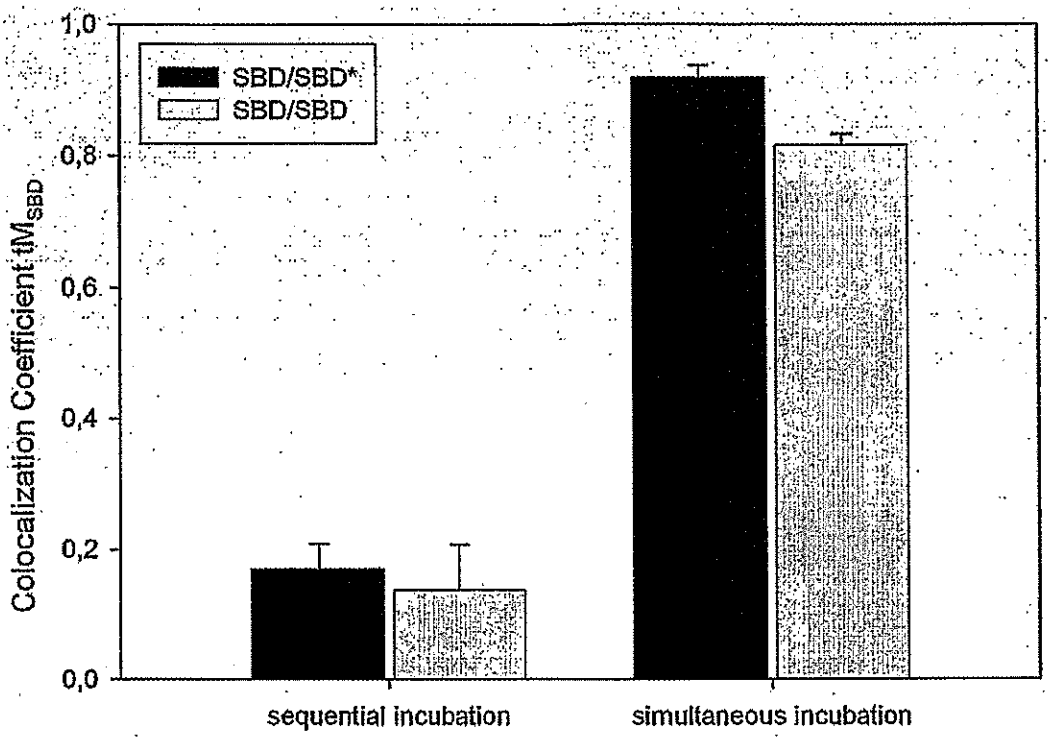

1,0
0,8
0,6
0,4
0,2
0,0
SBD/SBD*
SBD/SBD
Colocalization Coefficient tM$_{SBD}$
sequential incubation
simultaneous incubation

FIGURE 10

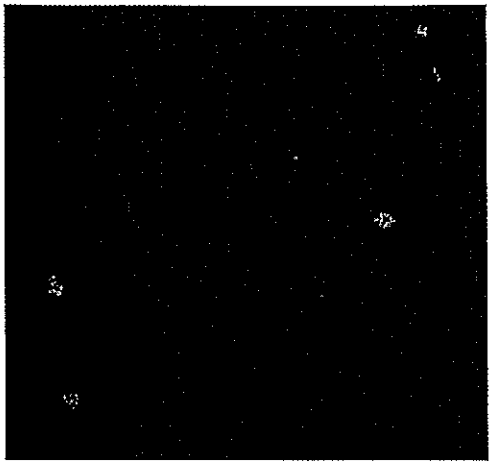


FIGURE 11

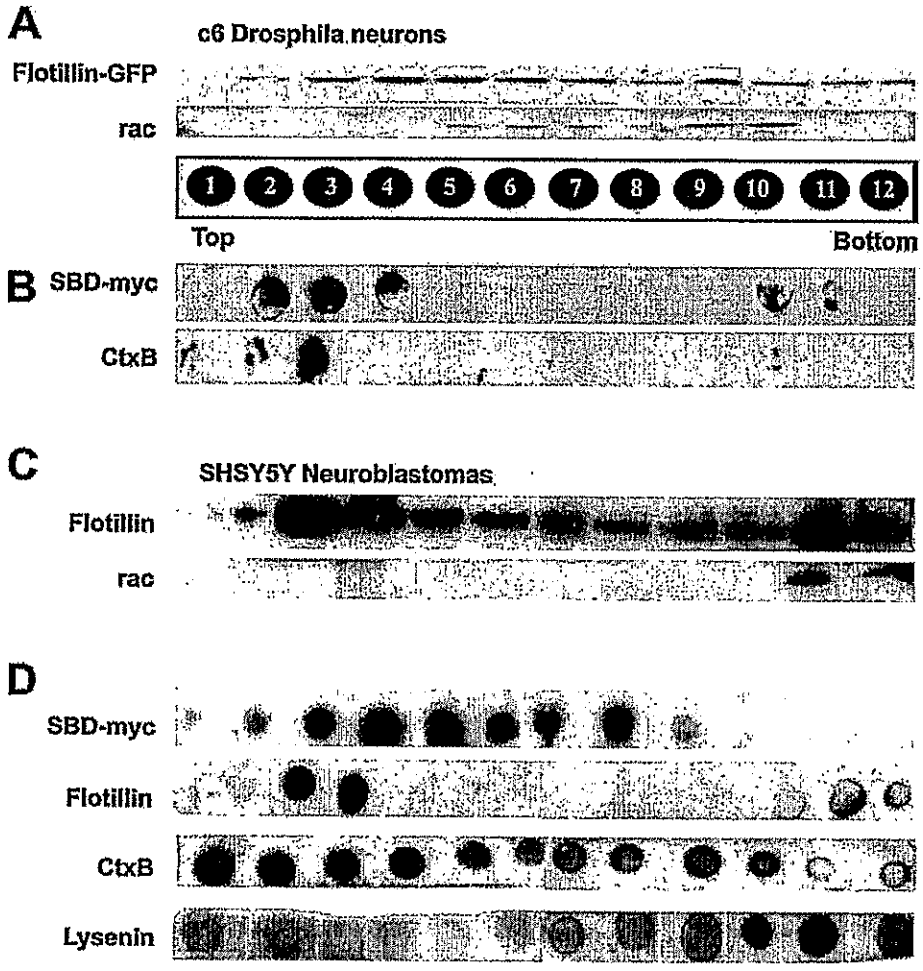

A
c6 Drosphila neurons
Flotillin-GFP
rac
1 2 3 4 5 6 7 8 9 10 11 12
Top
Bottom
B
SBD-myc
CtxB
C
SHSY5Y Neuroblastomas
Flotillin
rac
D
SBD-myc
Flotillin
CtxB
Lysenin

FIGURE 12

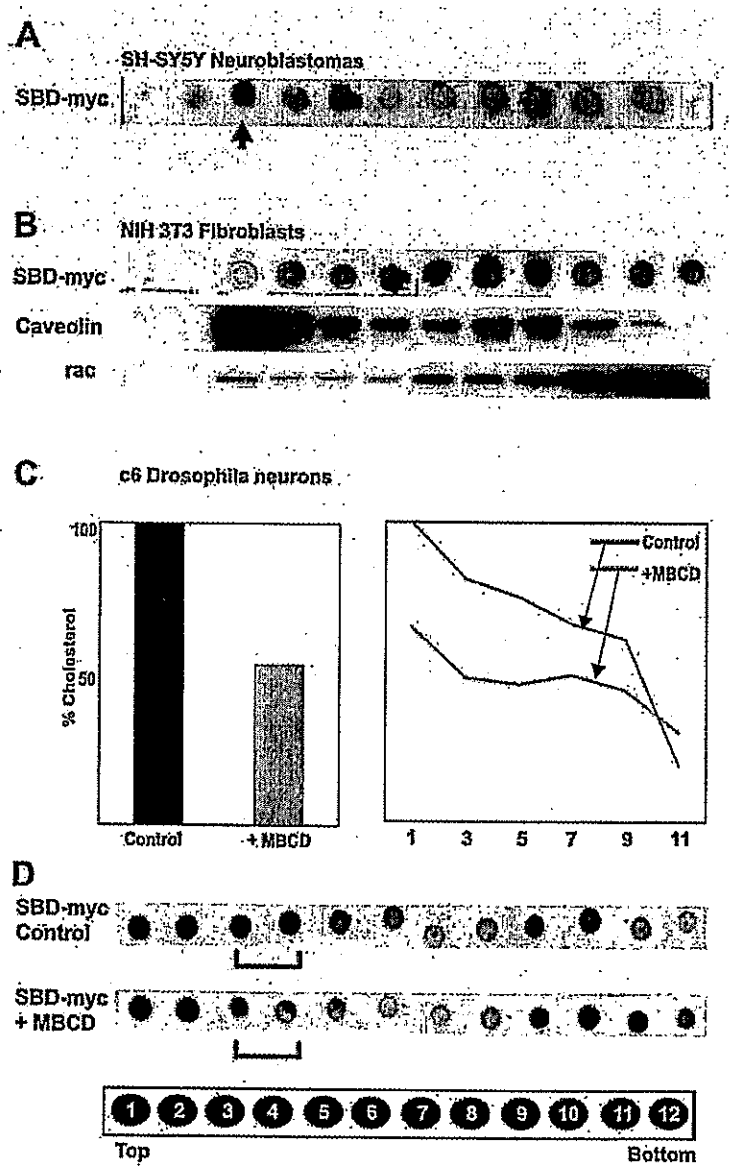

A
SH-SY5Y Neuroblastomas
SBD-myc
B
NIH 3T3 Fibroblasts
SBD-myc
Caveolin
rac
C
c6 Drosophila neurons
100
50
% Cholestarol
Control
+MBCD
Control
+MBCD
1
3
5
7
9
11
D
SBD-myc
Control
SBD-myc
+ MBCD
1
2
3
4
5
6
7
8
9
10
11
12
Top
Bottom

FIGURE 13

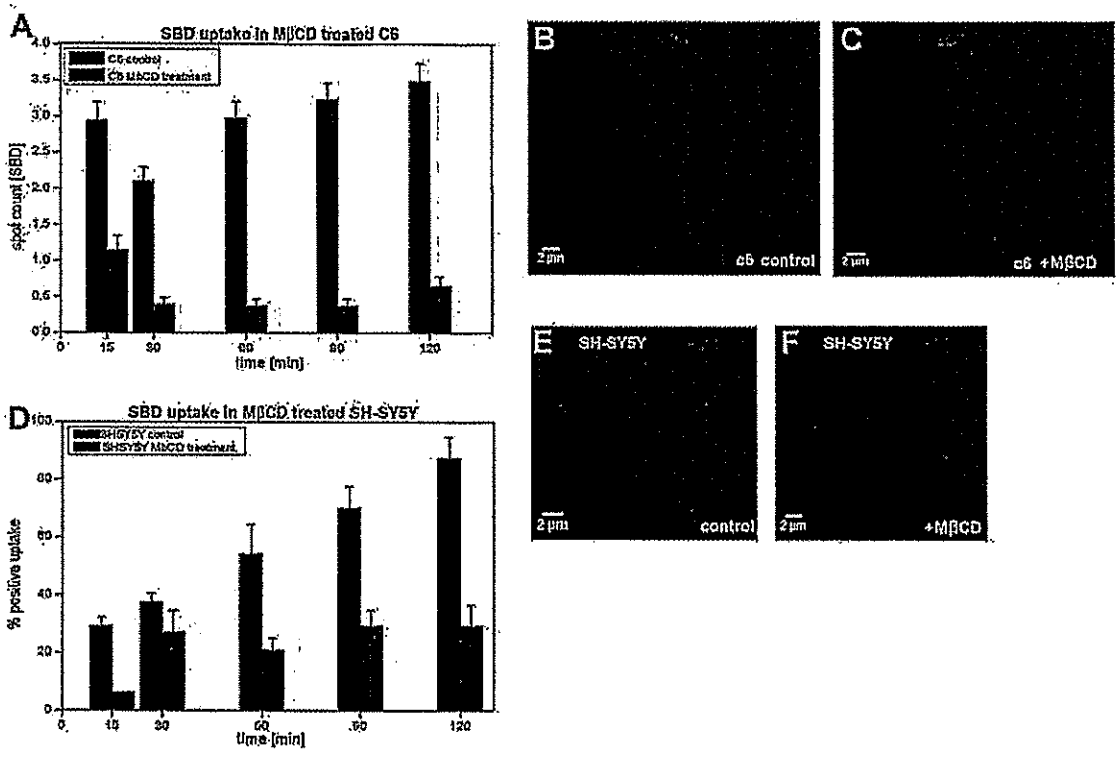

A
SBD uptake in MβCD treated C6
C6 control
C6 MβCD treatment
spot count [SBD]
time [min]
B
2µm
c6 control
C
2µm
c6 +MβCD
D
SBD uptake in MβCD treated SH-SY5Y
SH-SY5Y control
SH-SY5Y MβCD treatment
% positive uptake
time [min]
E
SH-SY5Y
2µm
control
F
SH-SY5Y
2µm
+MβCD

FIGURE 14

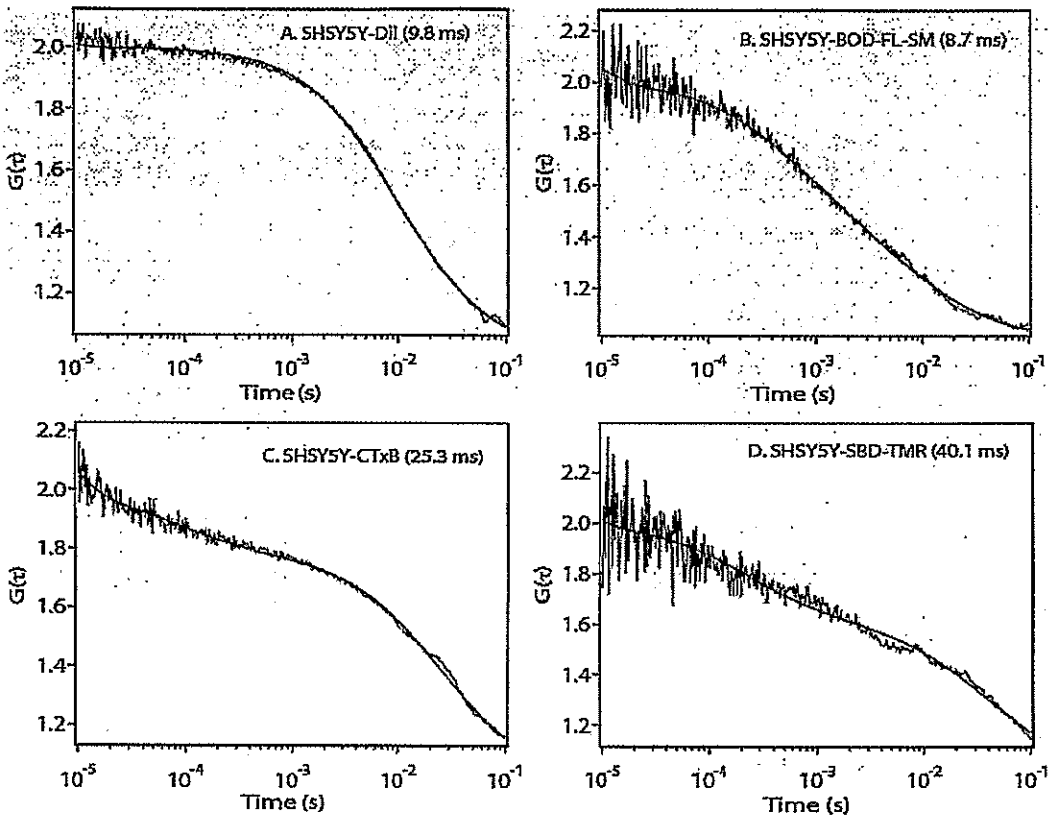

A. SH5Y5Y-DII (9.8 ms)
B. SH5Y5Y-BOD-FL-SM (8.7 ms)
C. SH5Y5Y-CTxB (25.3 ms)
D. SH5Y5Y-SBD-TMR (40.1 ms)
G(τ)
Time (s)

FIGURE 15

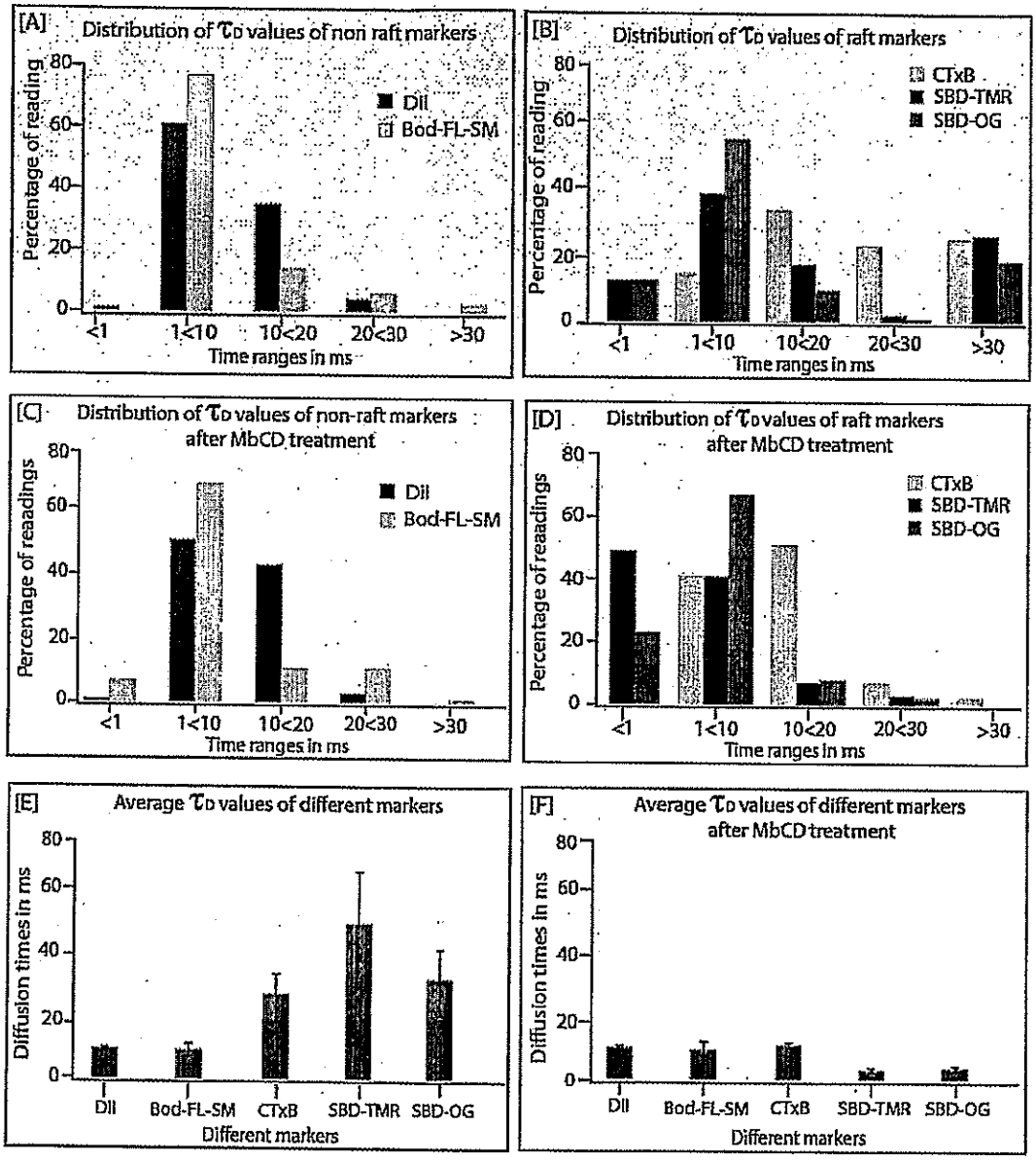

[A]
Distribution of τD values of non raft markers
Percentage of reading
80
60
40
20
0
DiI
Bod-FL-SM
<1
1<10
10<20
20<30
>30
Time ranges in ms
[B]
Distribution of τD values of raft markers
Percentage of reading
CTxB
SBD-TMR
SBD-OG
Time ranges in ms
[C]
Distribution of τD values of non-raft markers after MbCD treatment
Percentage of reaadings
Time ranges in ms
[D]
Distribution of τD values of raft markers after MbCD treatment
Percentage of reaadings
Time ranges in ms
[E]
Average τD values of different markers
Diffusion times in ms
DiI
Bod-FL-SM
CTxB
SBD-TMR
SBD-OG
Different markers
[F]
Average τD values of different markers after MbCD treatment
Diffusion times in ms
Different markers

FIGURE 16

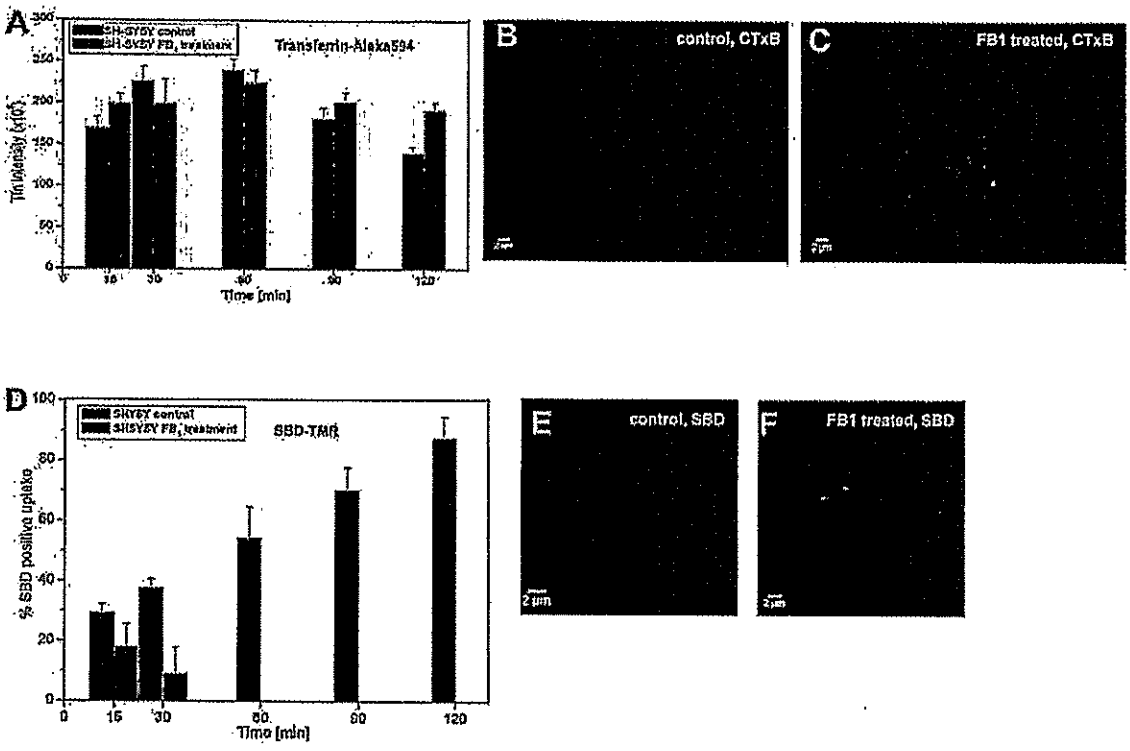

A
Transferrin-Alexa594
Time [min]
B
control, CTxB
C
FB1 treated, CTxB
D
SBD-TMR
% SBD positive uptake
Time [min]
E
control, SBD
F
FB1 treated, SBD
2 µm

FIGURE 17

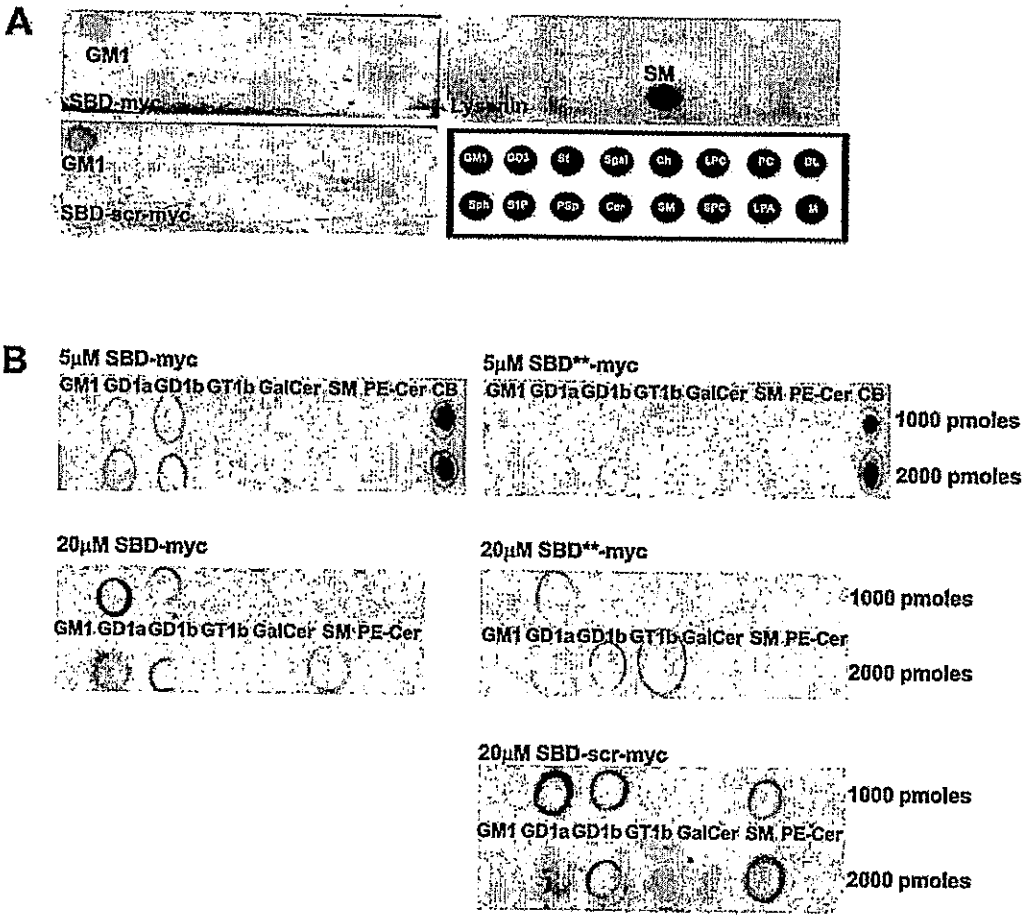

A
GM1
SBD-myc
Lysate
SM
GM1
SBD-scr-myc
GM1 GD3 St SpM Ch LPC PC BL
Sph S1P PGP Cer SM SPC LPA M
B
5μM SBD-myc
GM1 GD1a GD1b GT1b GalCer SM PE-Cer CB
5μM SBD**-myc
GM1 GD1a GD1b GT1b GalCer SM PE-Cer CB
1000 pmoles
2000 pmoles
20μM SBD-myc
GM1 GD1a GD1b GT1b GalCer SM PE-Cer
20μM SBD**-myc
1000 pmoles
GM1 GD1a GD1b GT1b GalCer SM PE-Cer
2000 pmoles
20μM SBD-scr-myc
1000 pmoles
GM1 GD1a GD1b GT1b GalCer SM PE-Cer
2000 pmoles

FIGURE 18