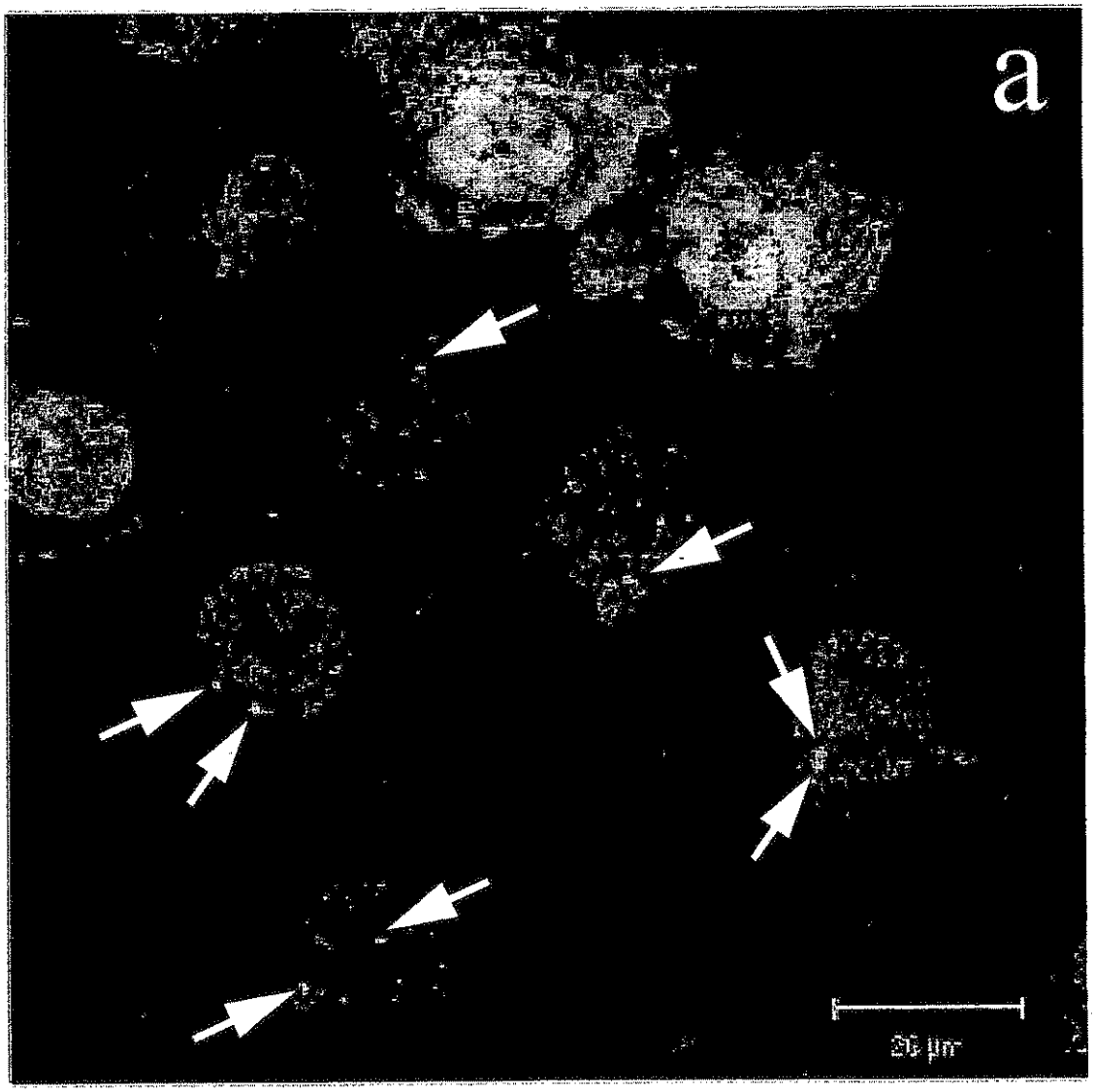
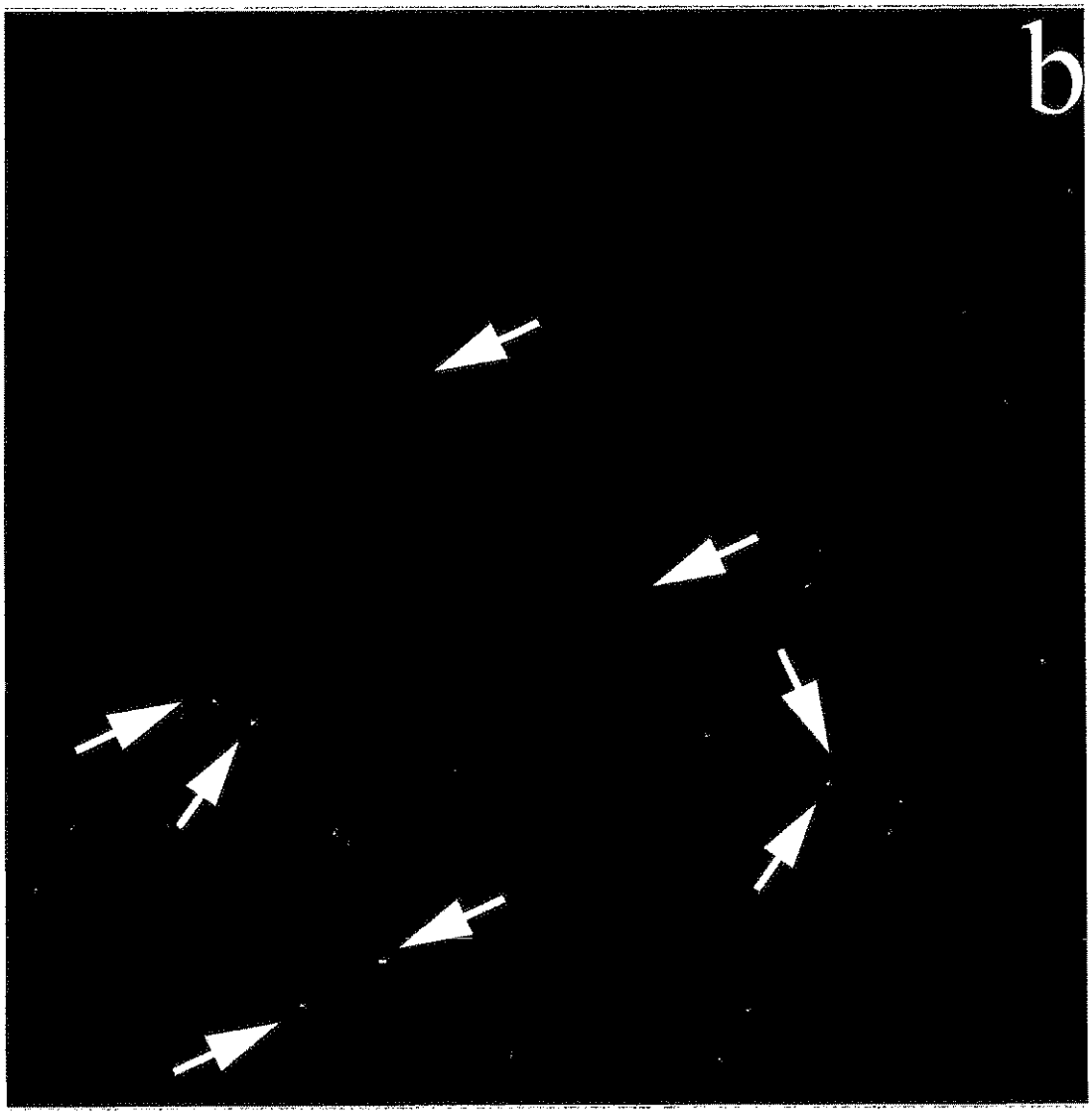
FIGURE 1A

VHZ-EGFP



Pericentrin

FIGURE 1A (CONTINUED)



Merged

FIGURE 1A (CONTINUED)

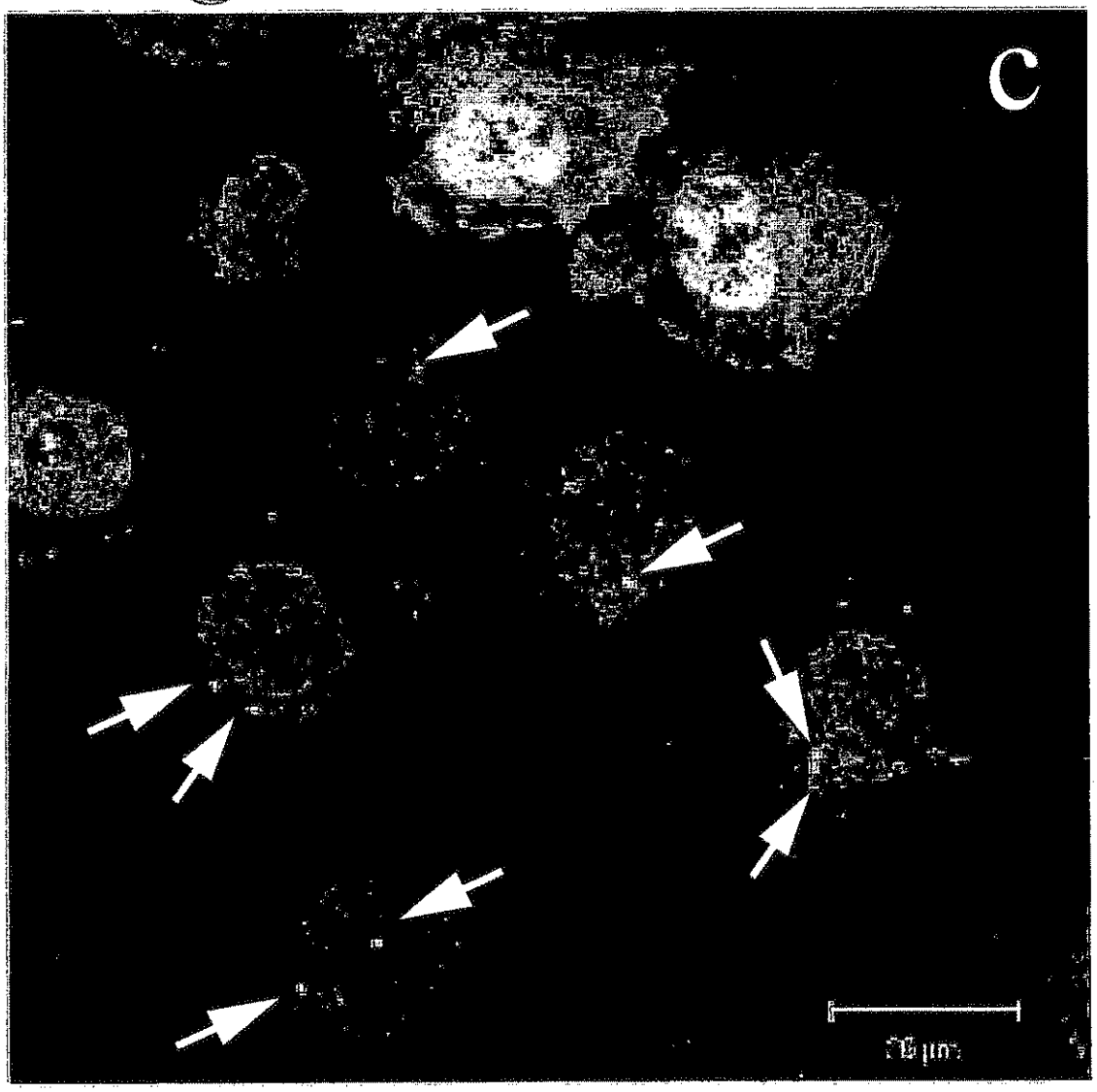


FIGURE 1B

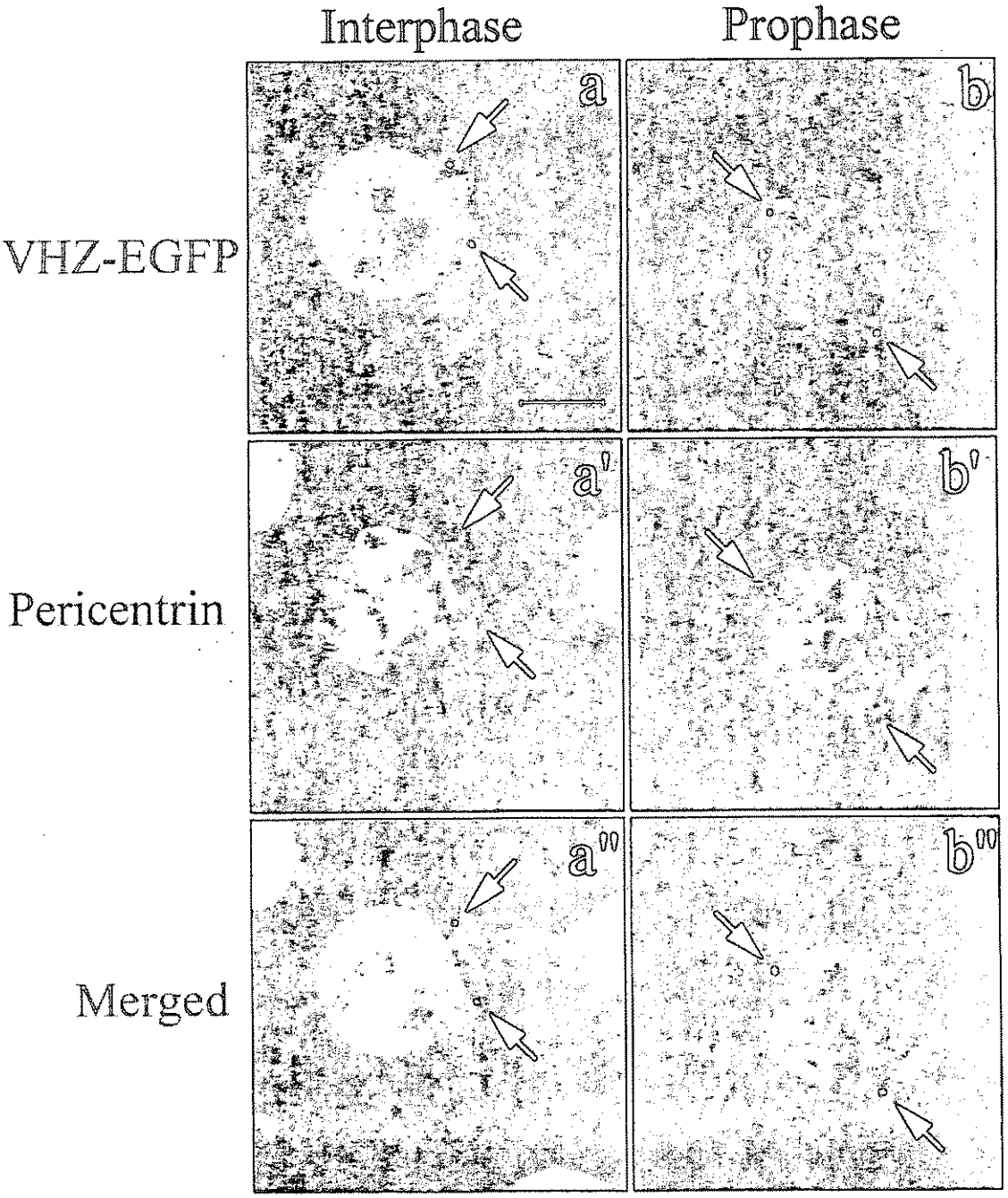


FIGURE 1B (CONTINUED)

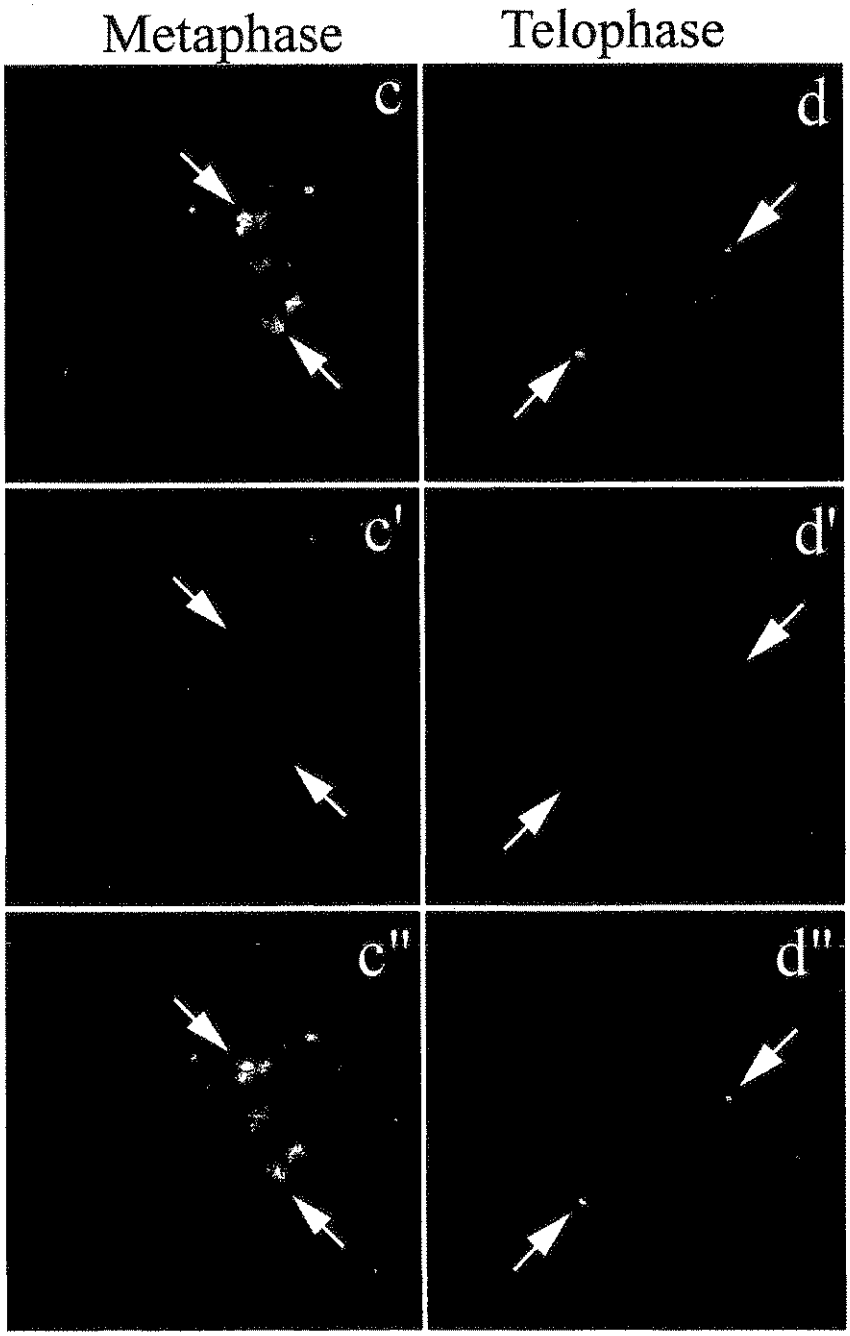


FIGURE 2A

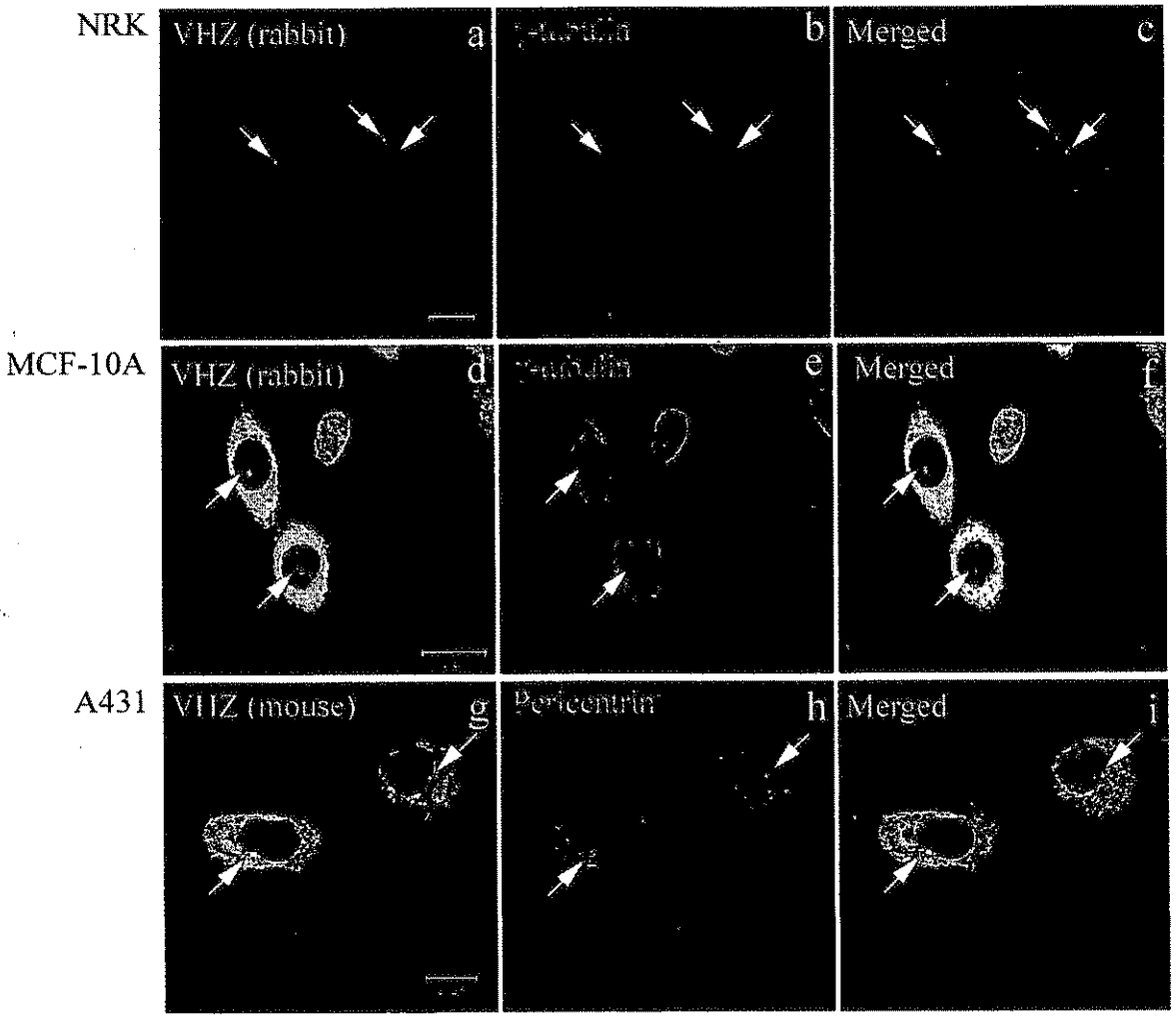

NRK
VHZ (rabbit)
a
b
Merged
c
MCF-10A
VHZ (rabbit)
d
e
Merged
f
A431
VHZ (mouse)
g
Pericentrin
h
Merged
i

FIGURE 2B

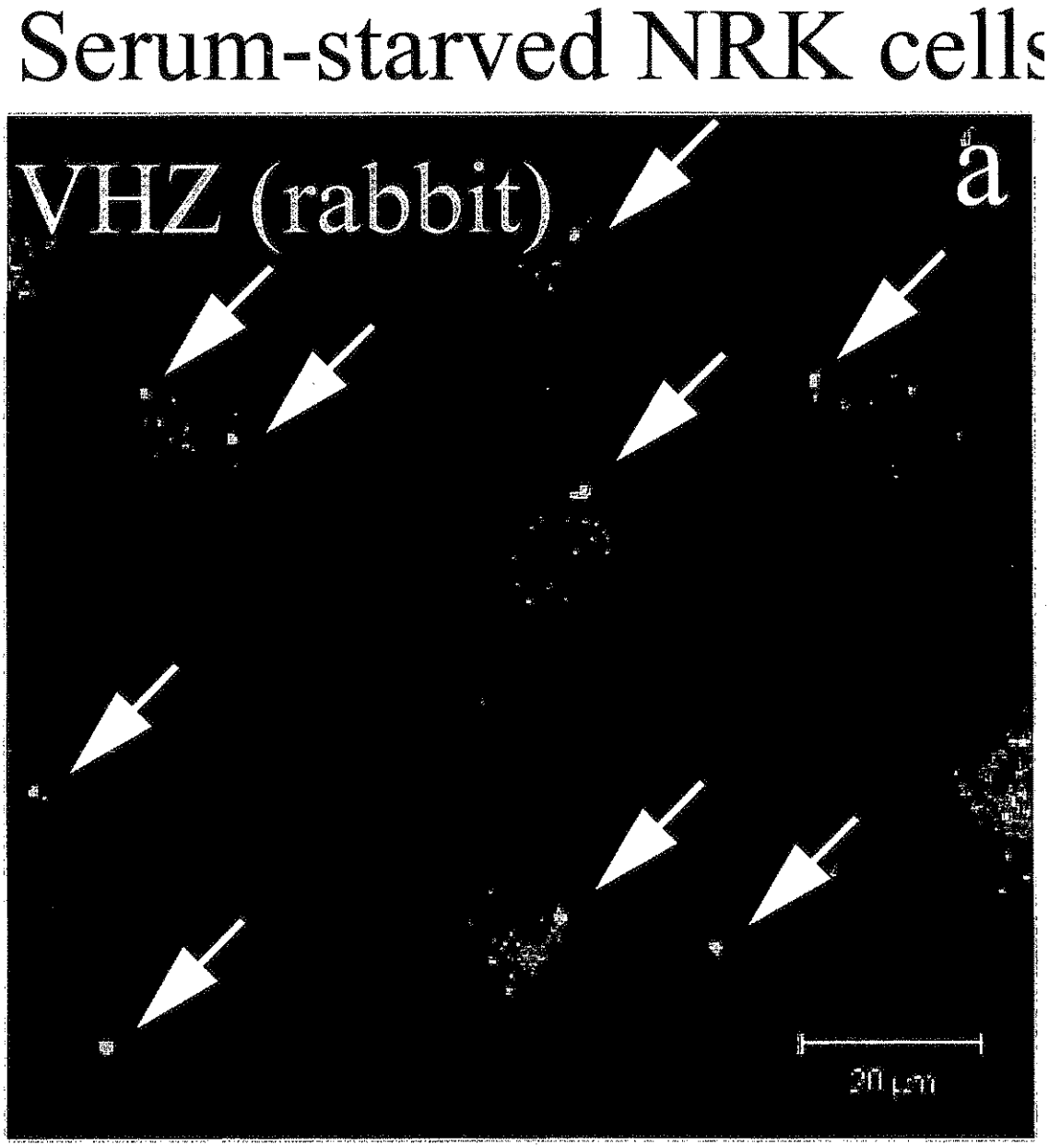


FIGURE 2B (CONTINUED)

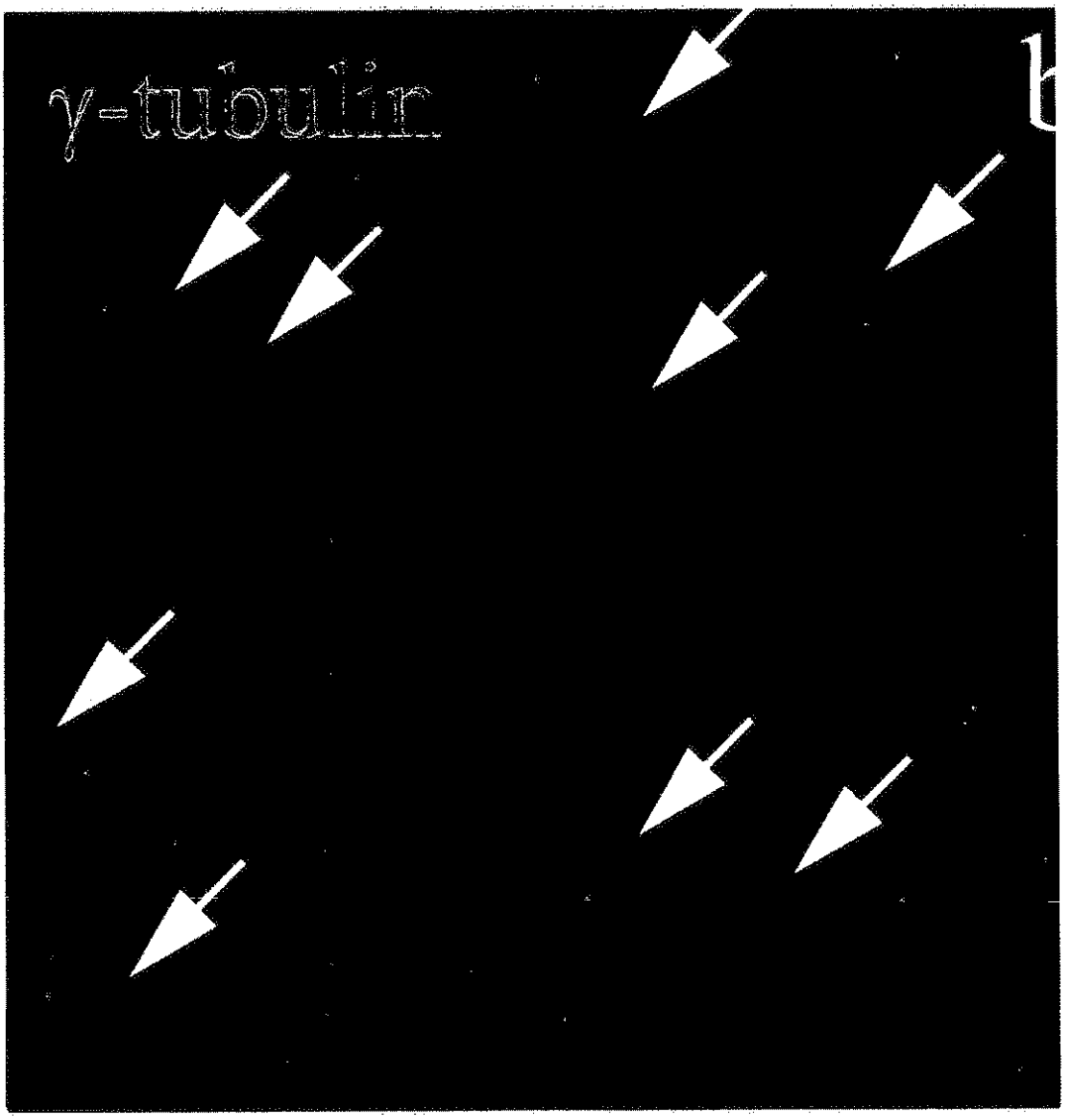


FIGURE 2B (CONTINUED)

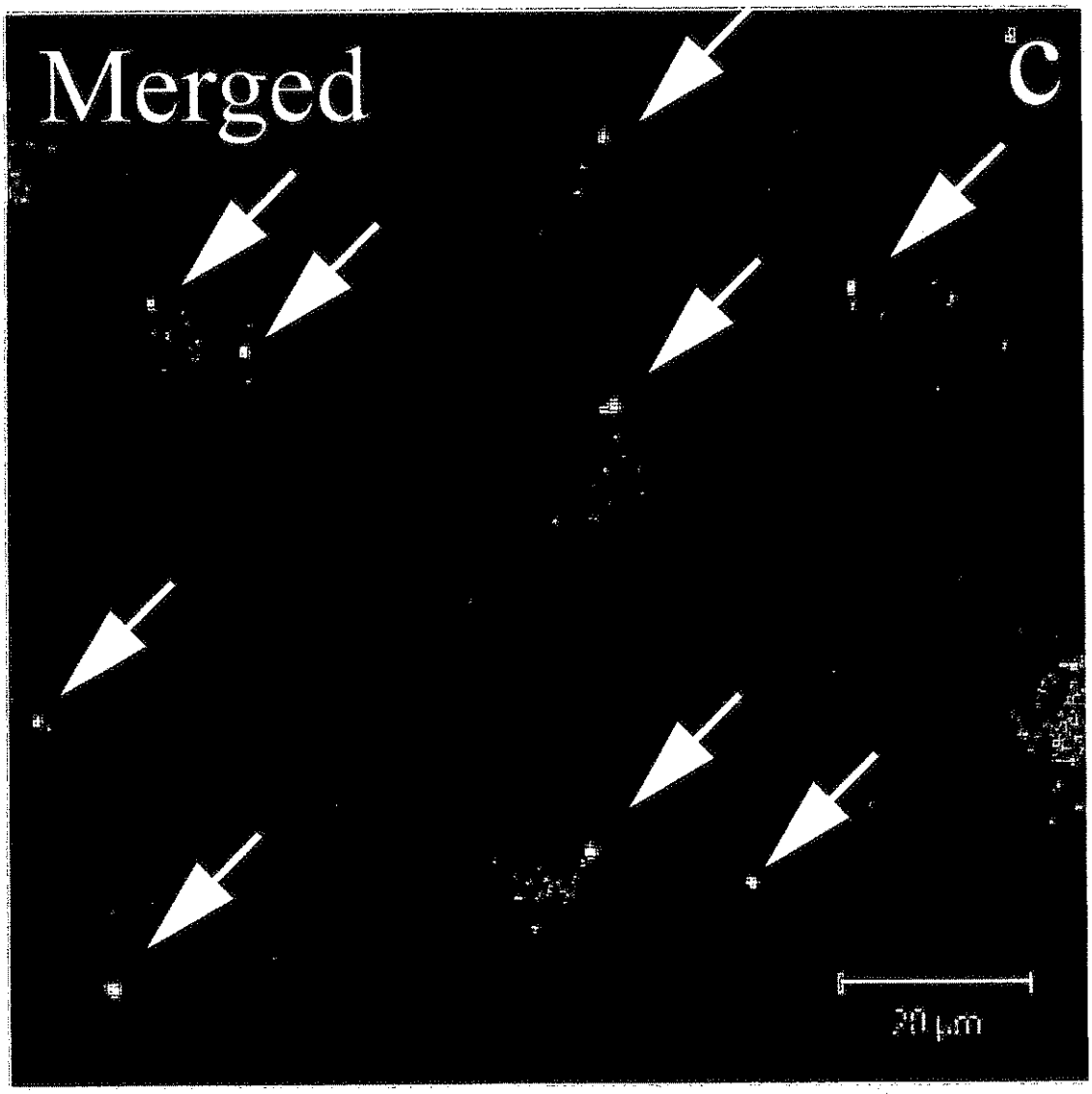


FIGURE 3A

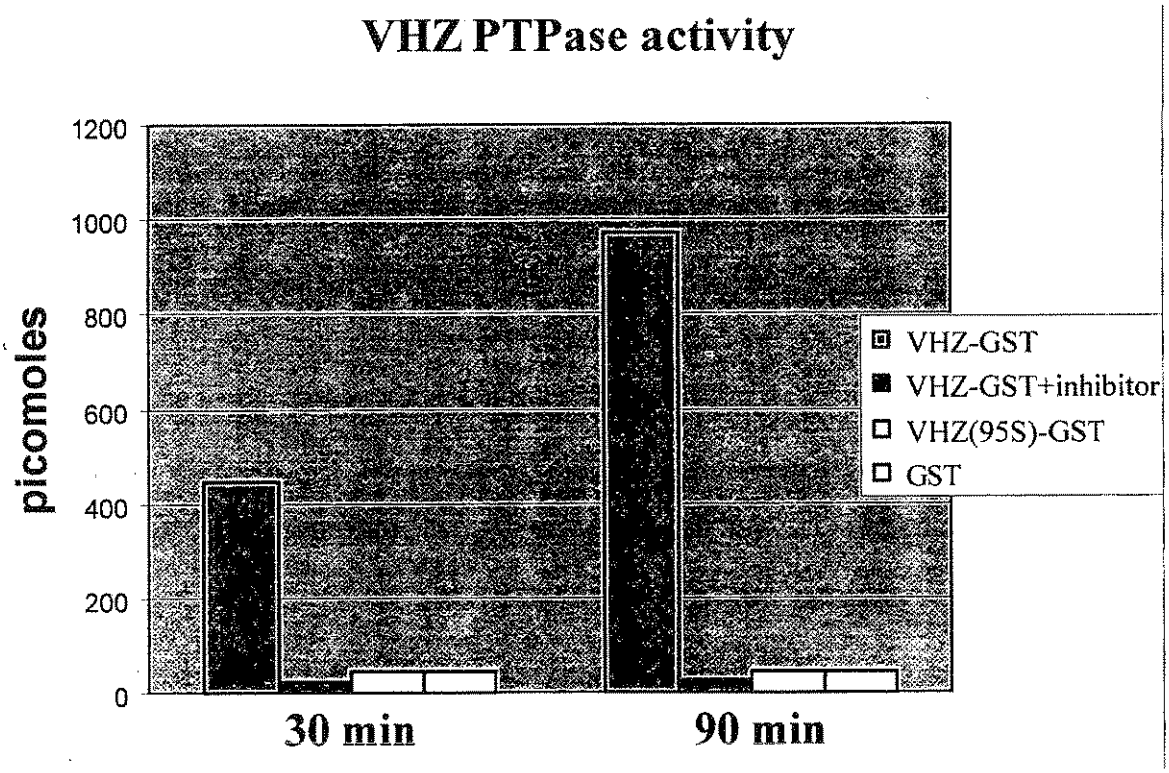

VHZ PTPase activity
picomoles
1200
1000
800
600
400
200
0
30 min
90 min
VHZ-GST
VHZ-GST+inhibitor
VHZ(95S)-GST
GST

FIGURE 3B

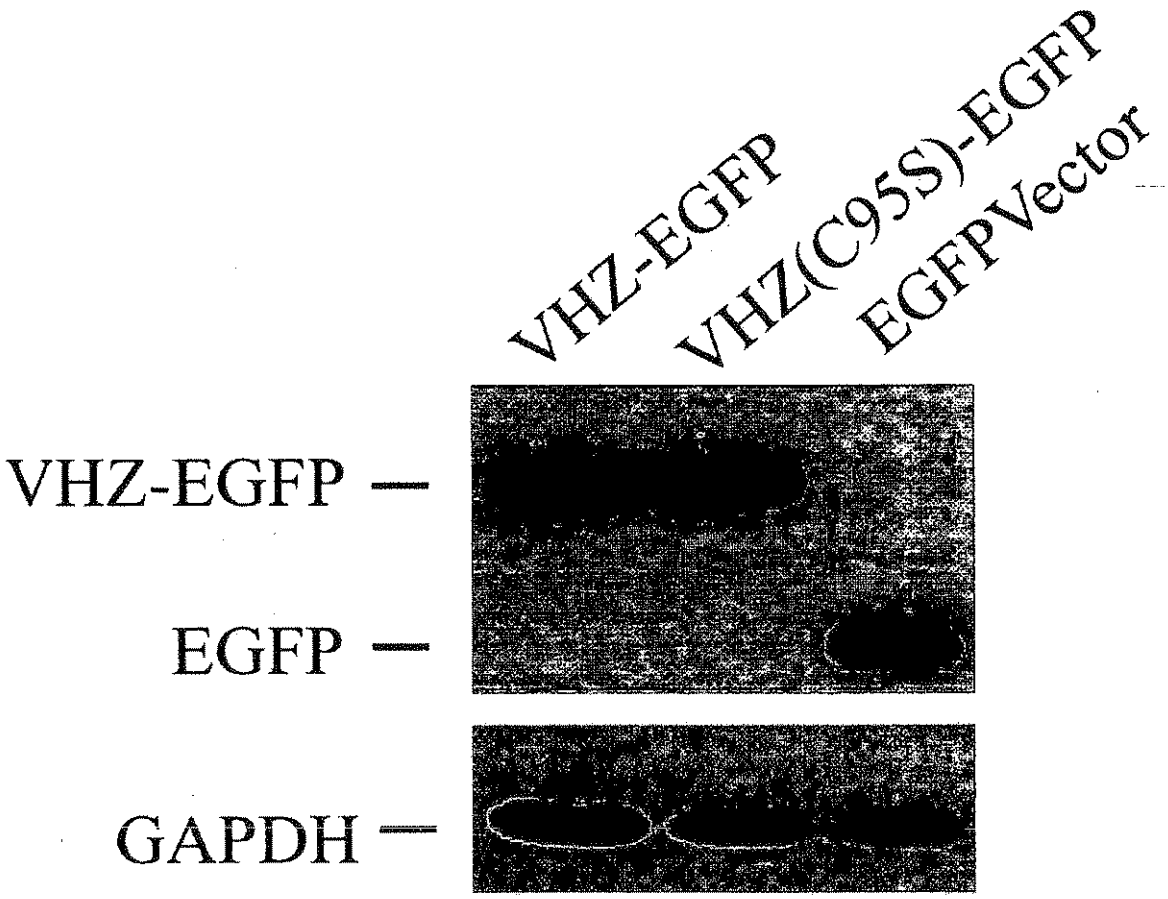


FIGURE 3B (CONTINUED)

b MCF-VHZ-EGFP

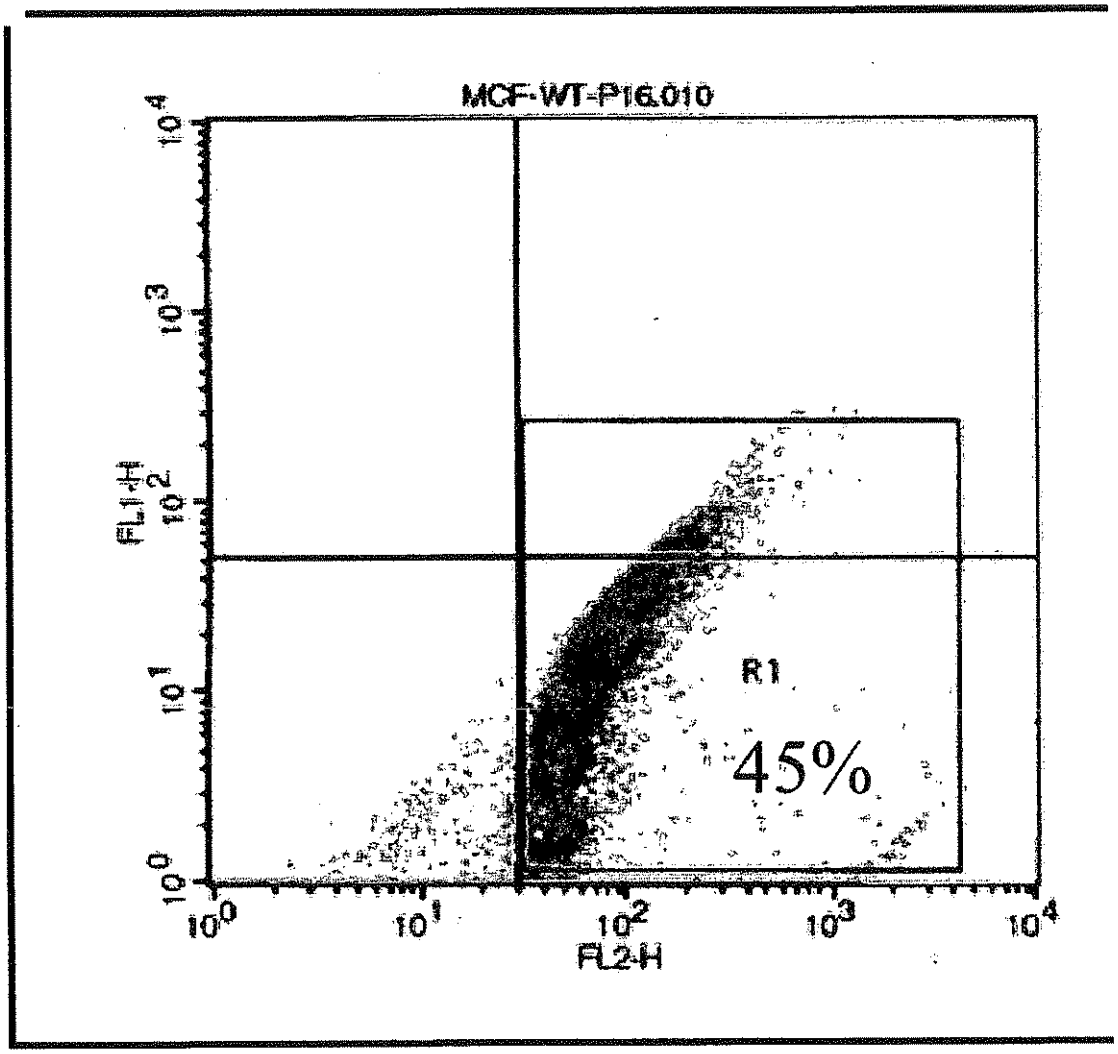


FIGURE 3B (CONTINUED)

MCF-VHZ(C95S)-EGFP

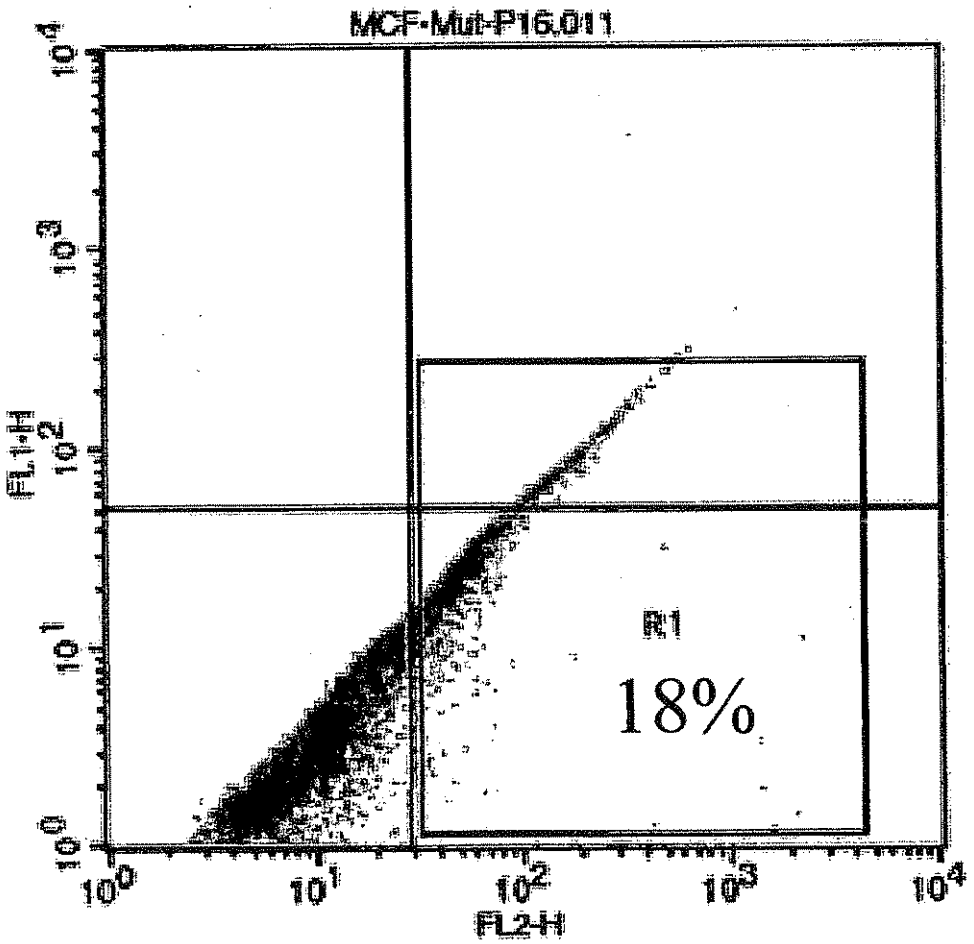


FIGURE 3B (CONTINUED)

MCF-EGFP Vector

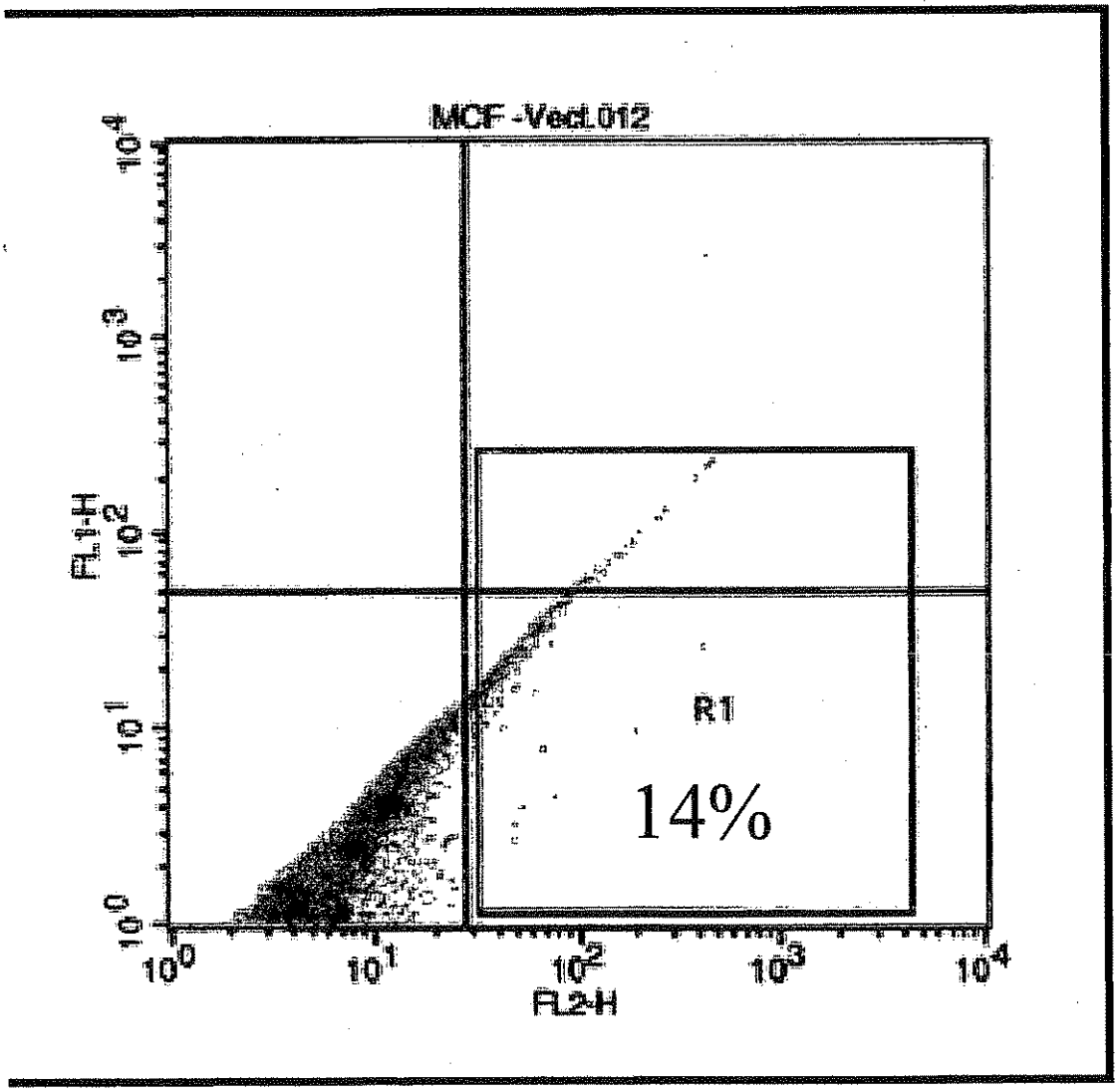


FIGURE 3C

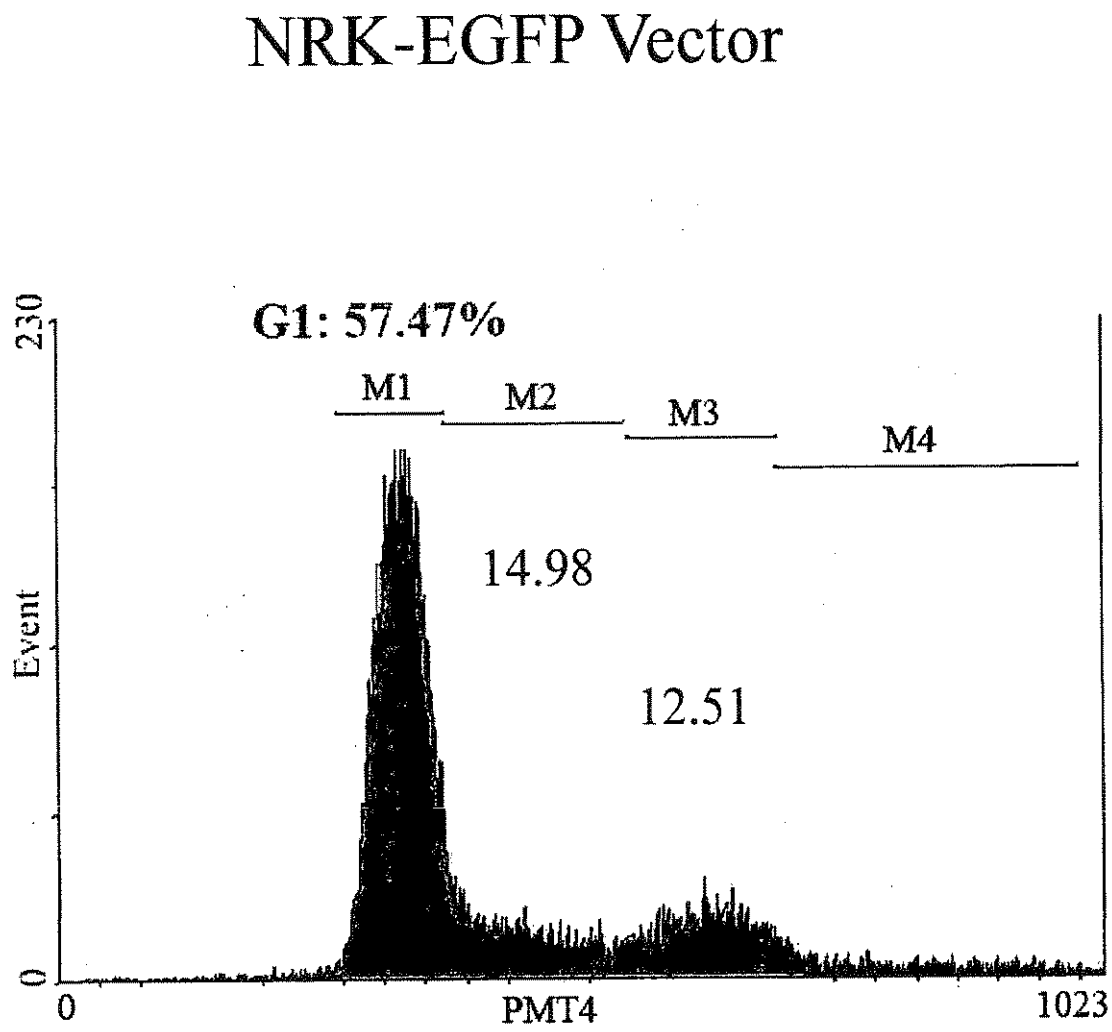

NRK-EGFP Vector
G1: 57.47%
M1
M2
M3
M4
14.98
12.51
230
Event
0
0
PMT4
1023

FIGURE 3C (CONTINUED)

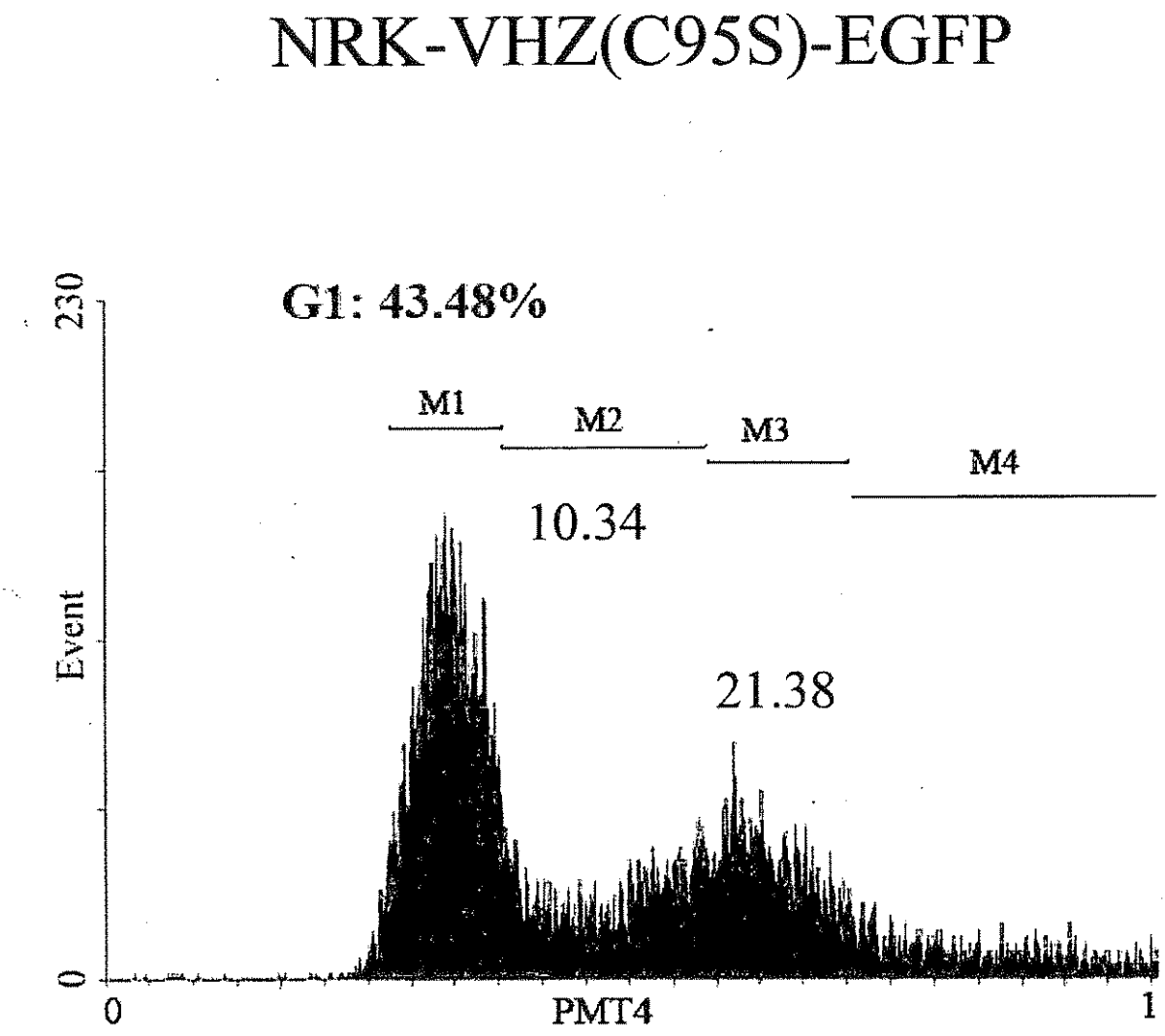


FIGURE 3C (CONTINUED)

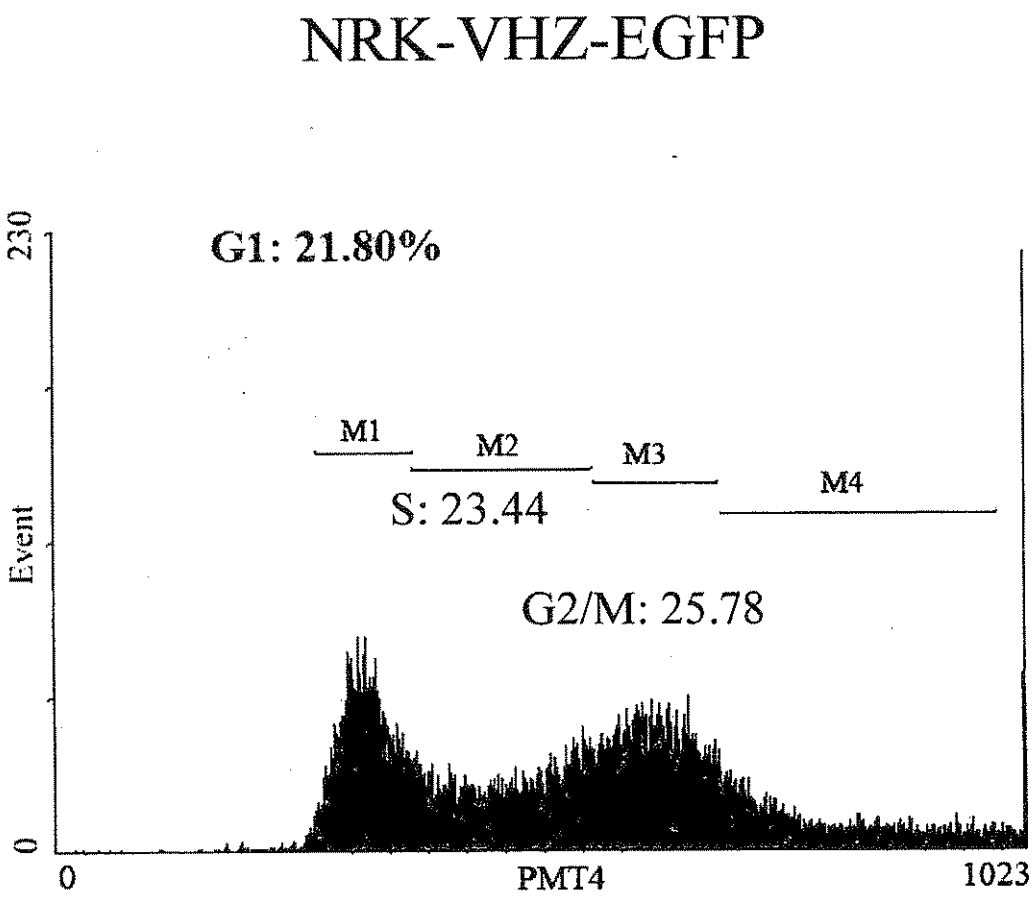


FIGURE 4A

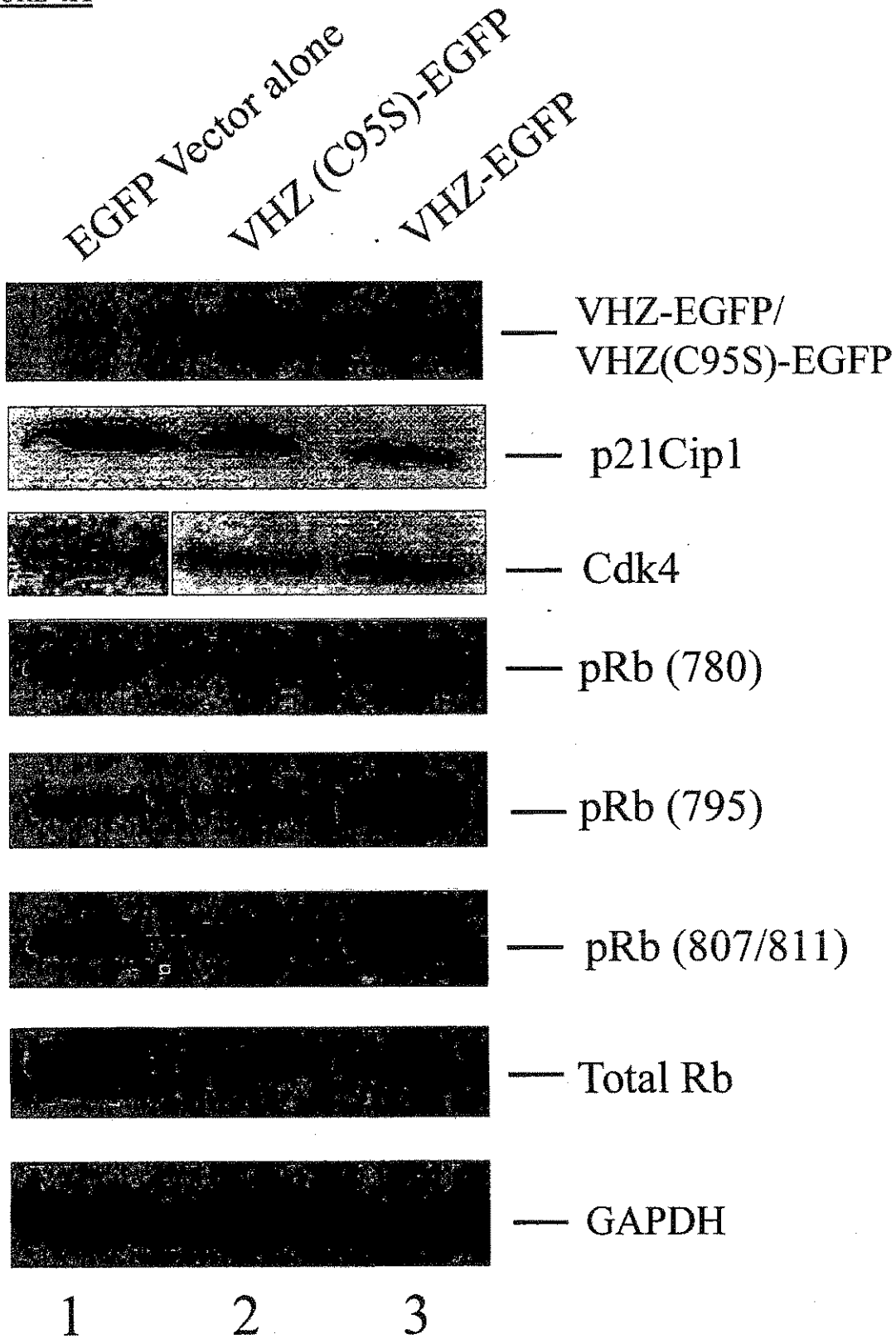

EGFP Vector alone
VHZ (C95S)-EGFP
VHZ-EGFP
VHZ-EGFP/
VHZ(C95S)-EGFP
p21Cip1
Cdk4
pRb (780)
pRb (795)
pRb (807/811)
Total Rb
GAPDH
1
2
3

FIGURE 4B

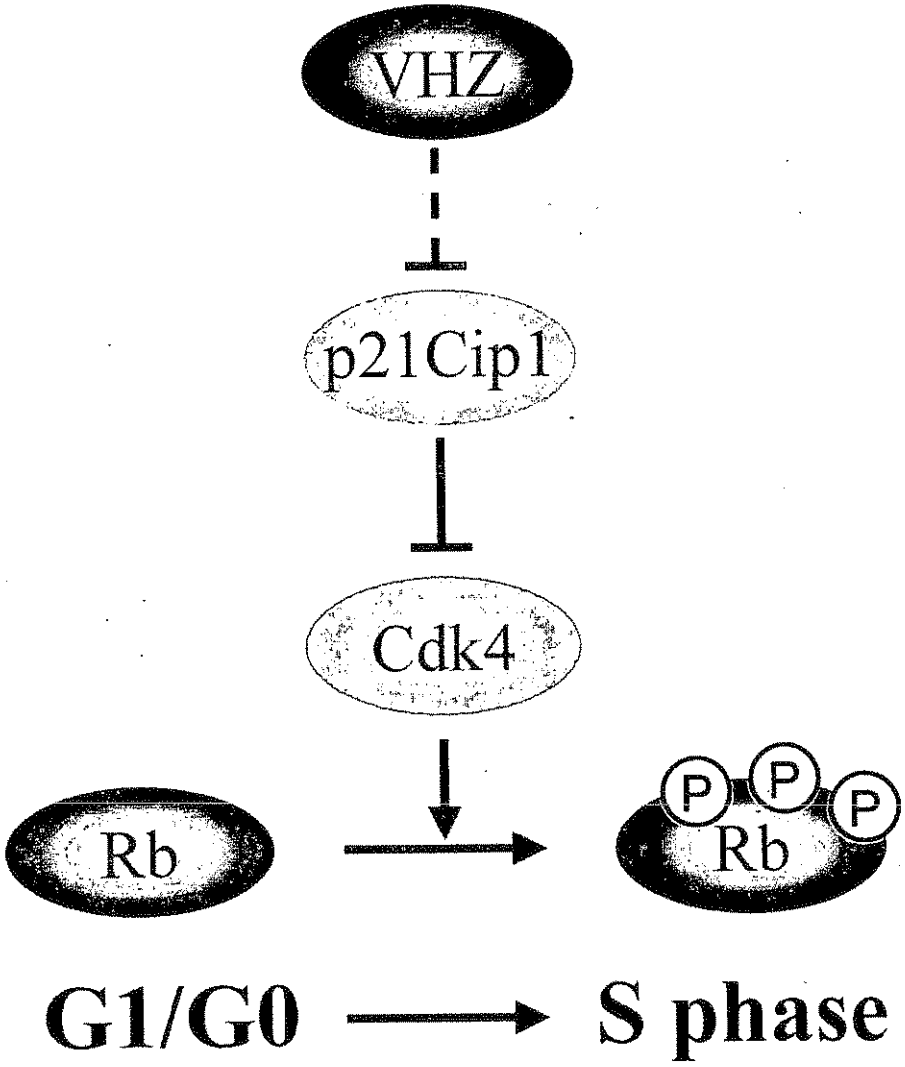


FIGURE 5A

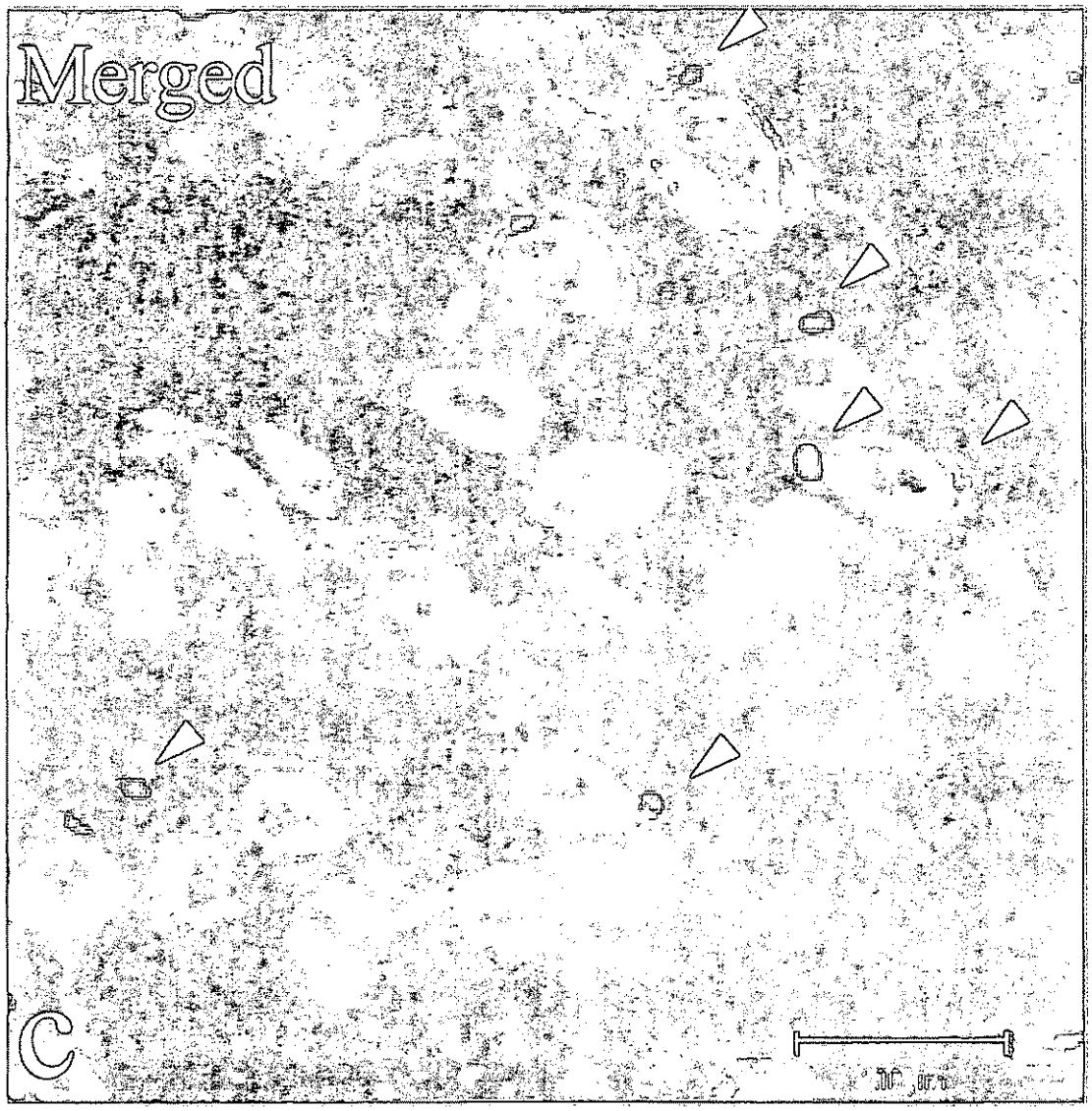


FIGURE 5A (CONTINUED)

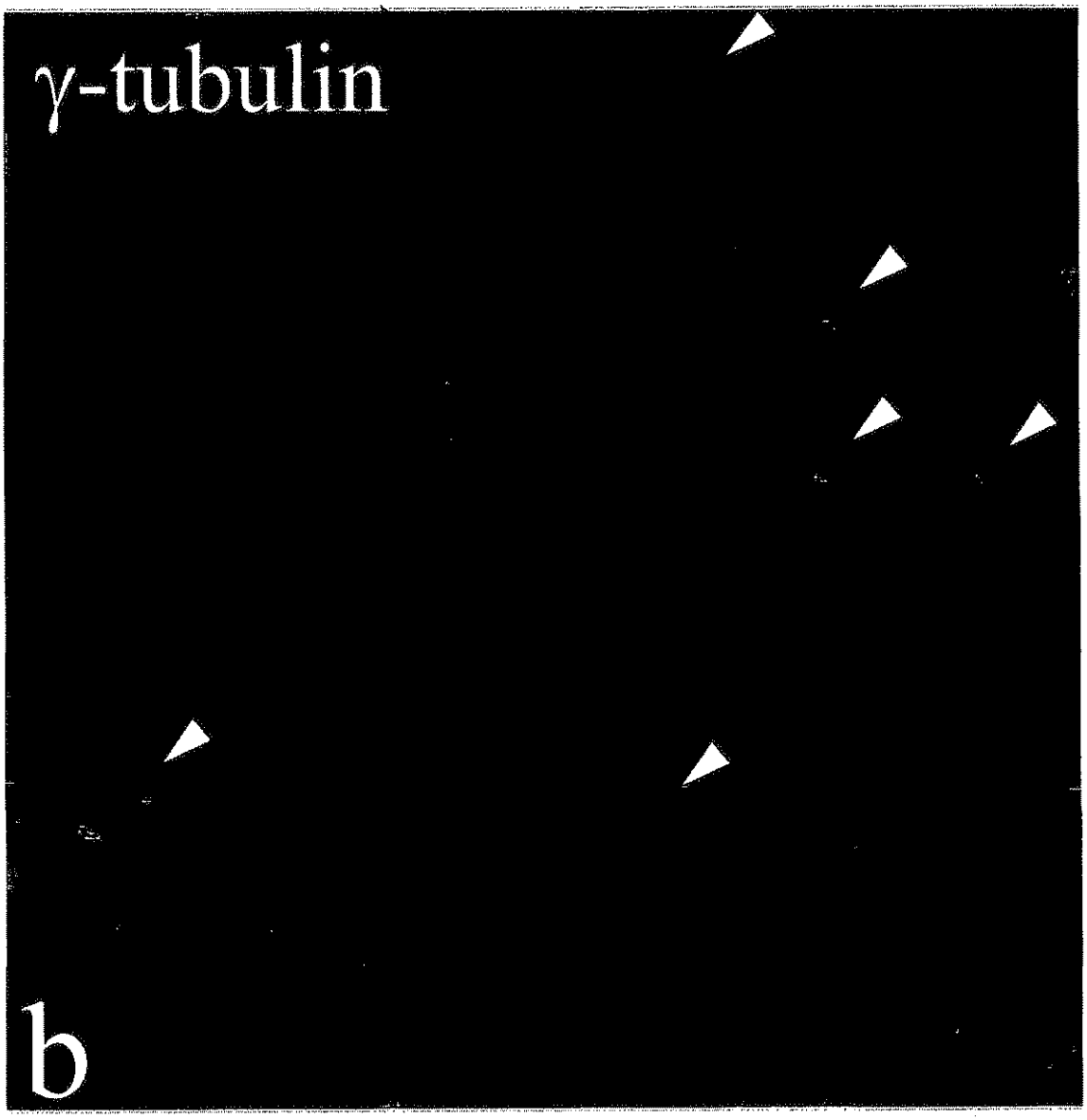


FIGURE 5A (CONTINUED)

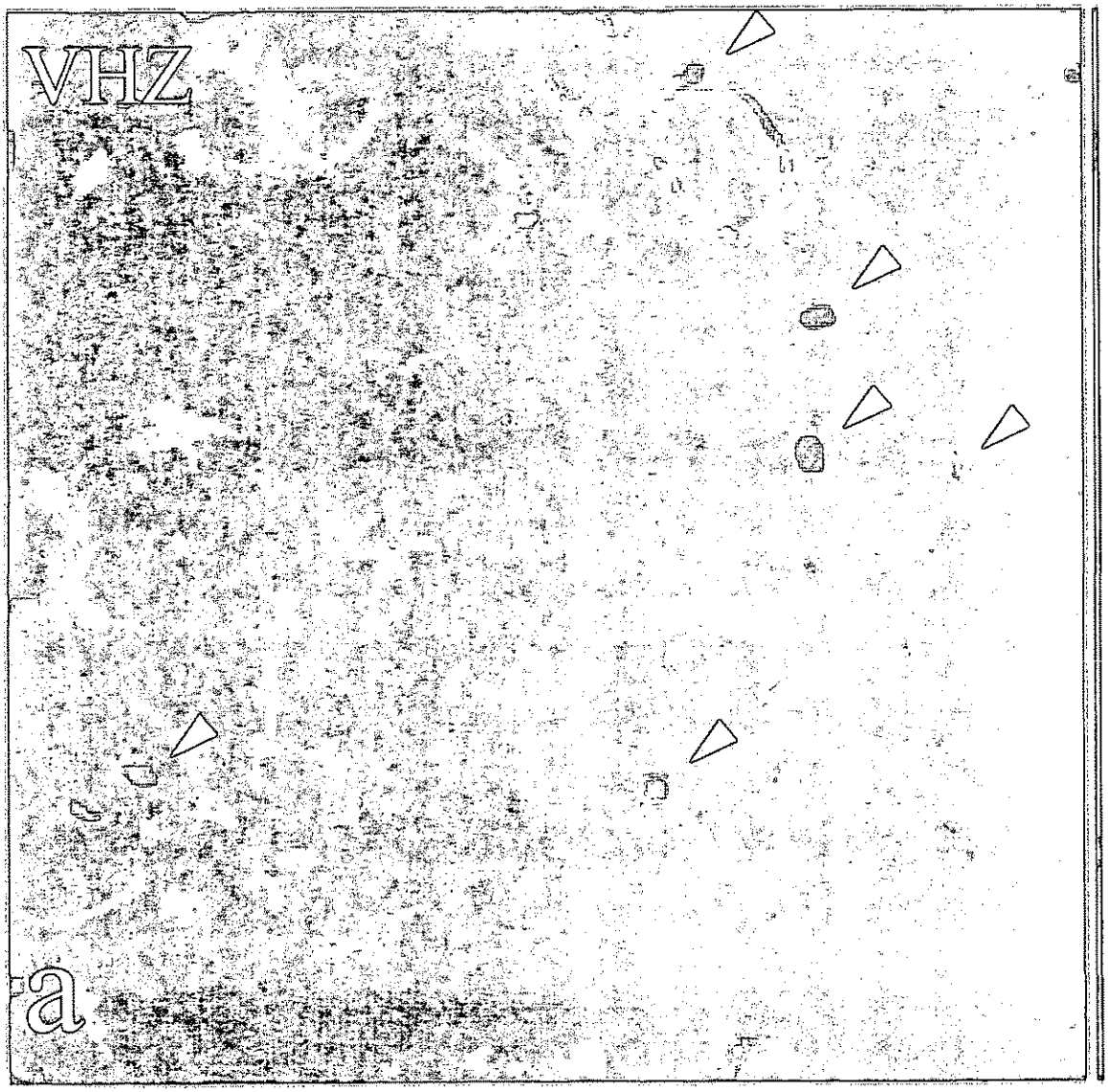


FIGURE 5B

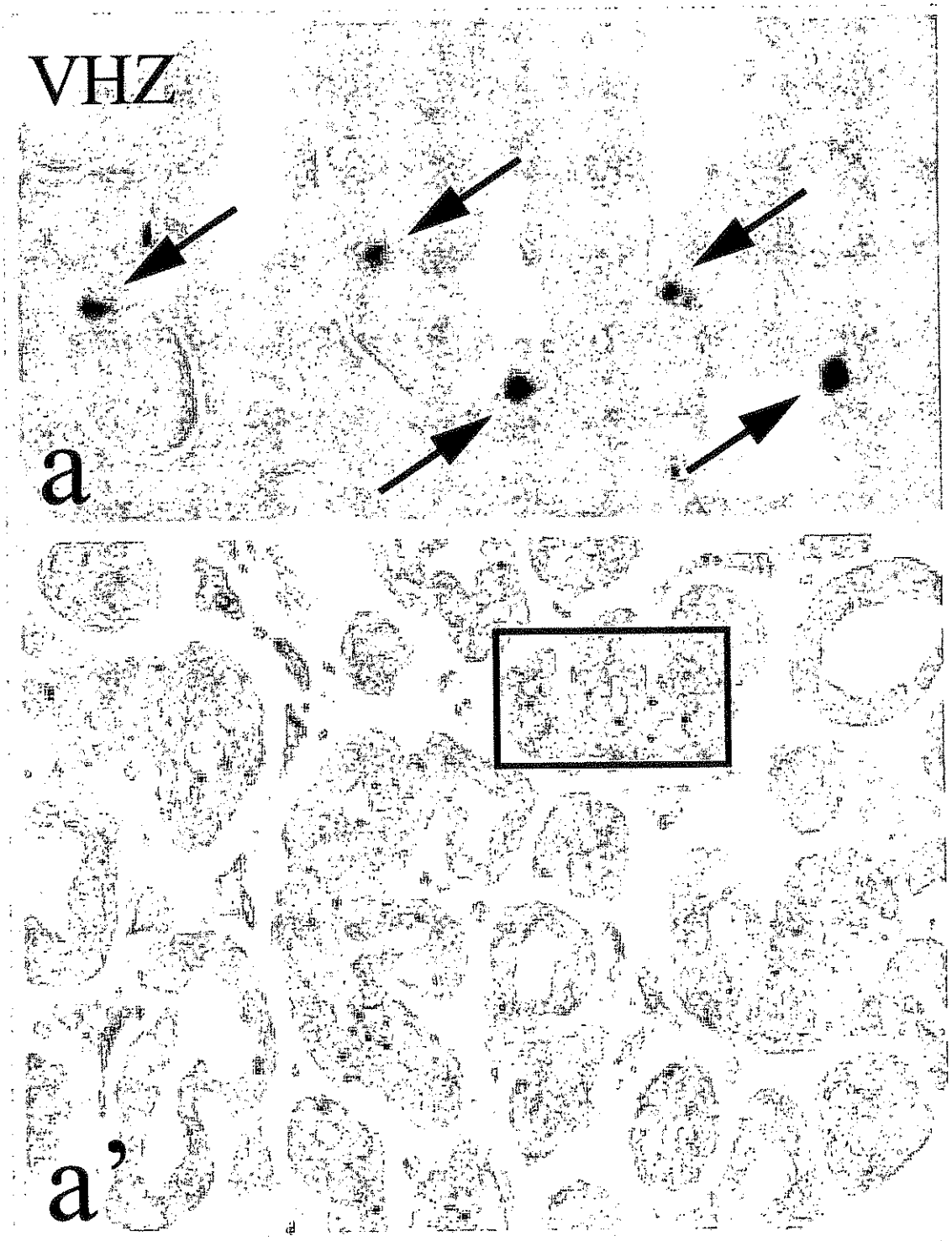


FIGURE 5B (CONTINUED)

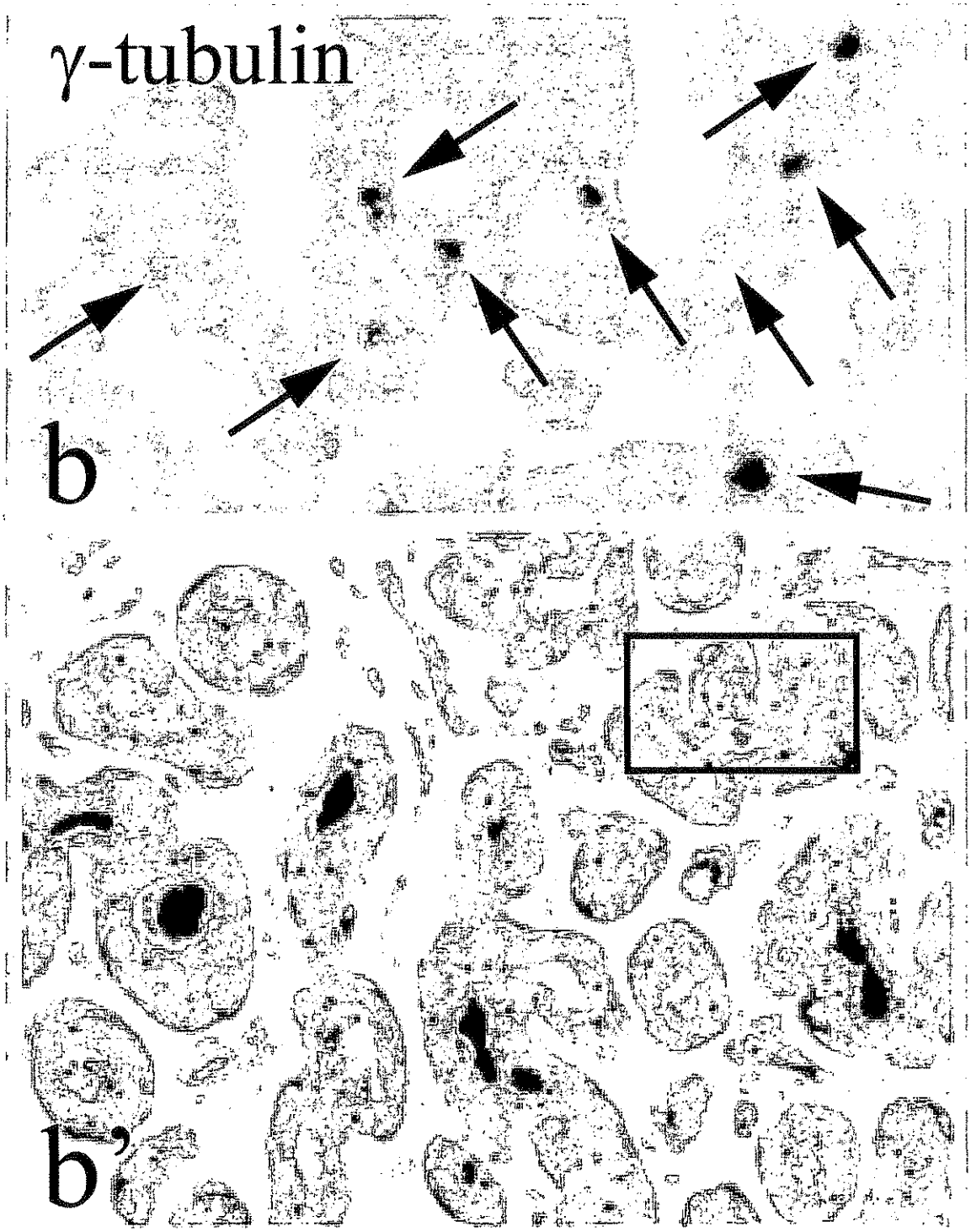


FIGURE 5B (CONTINUED)

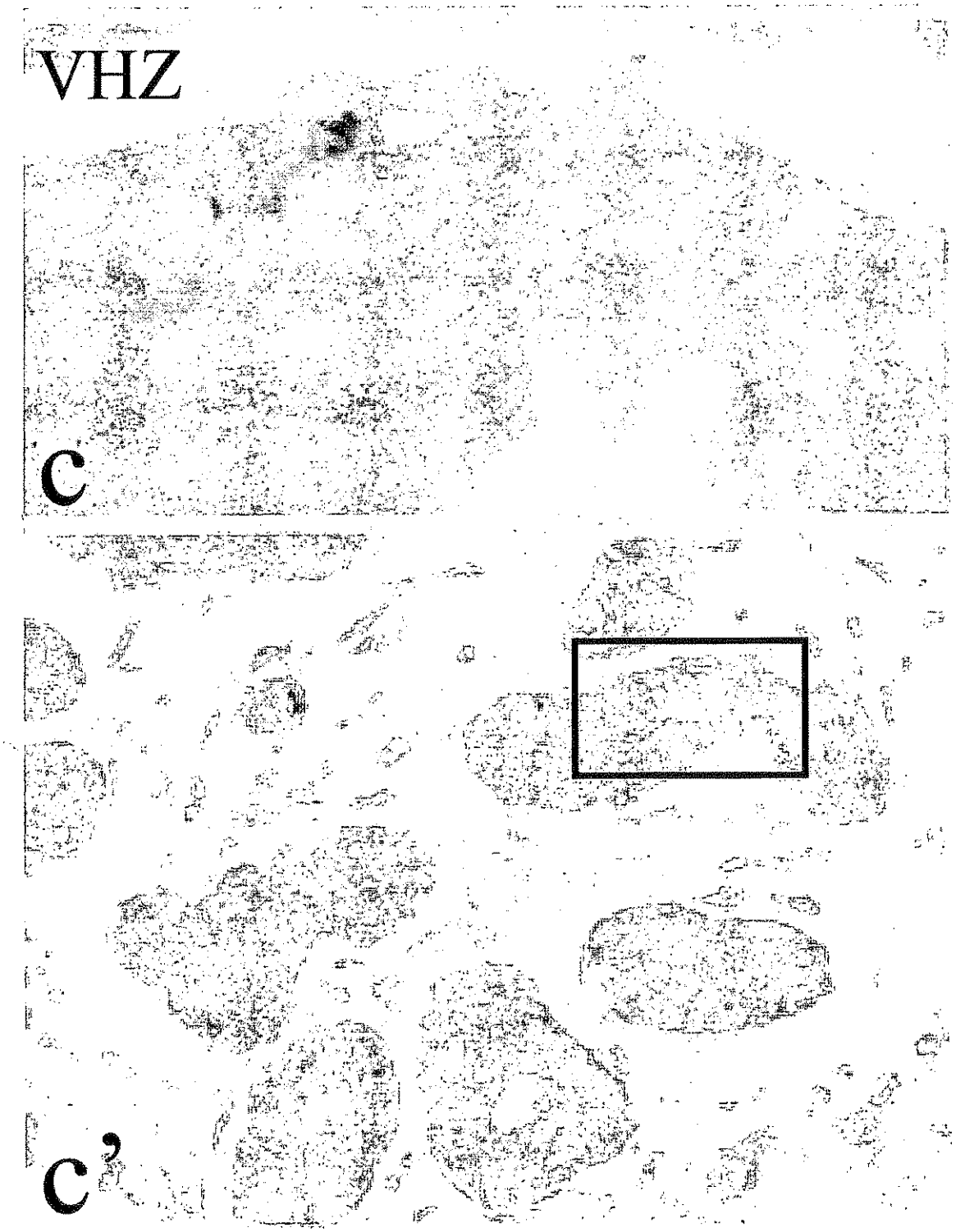


FIGURE 5C

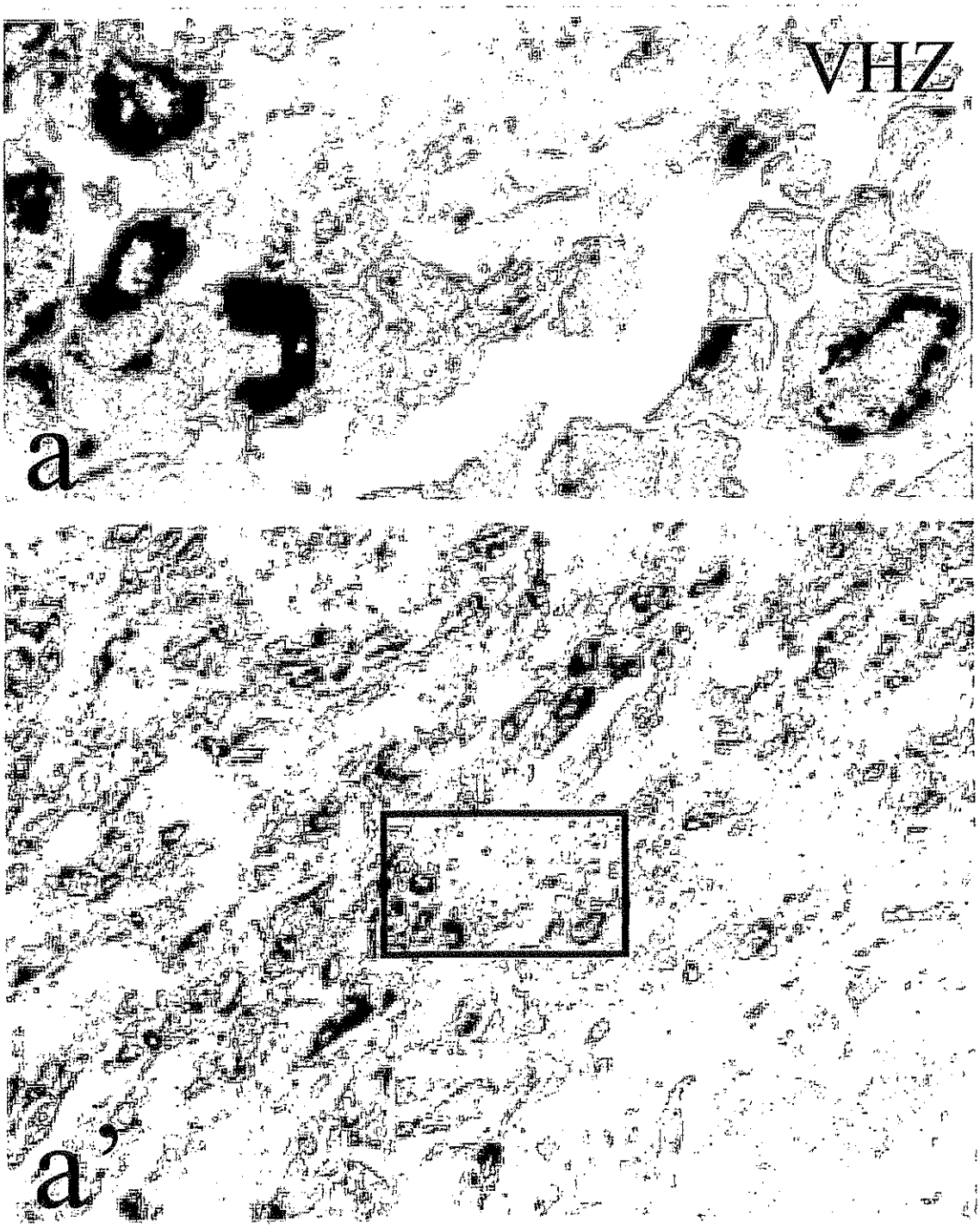


FIGURE 5C (CONTINUED)

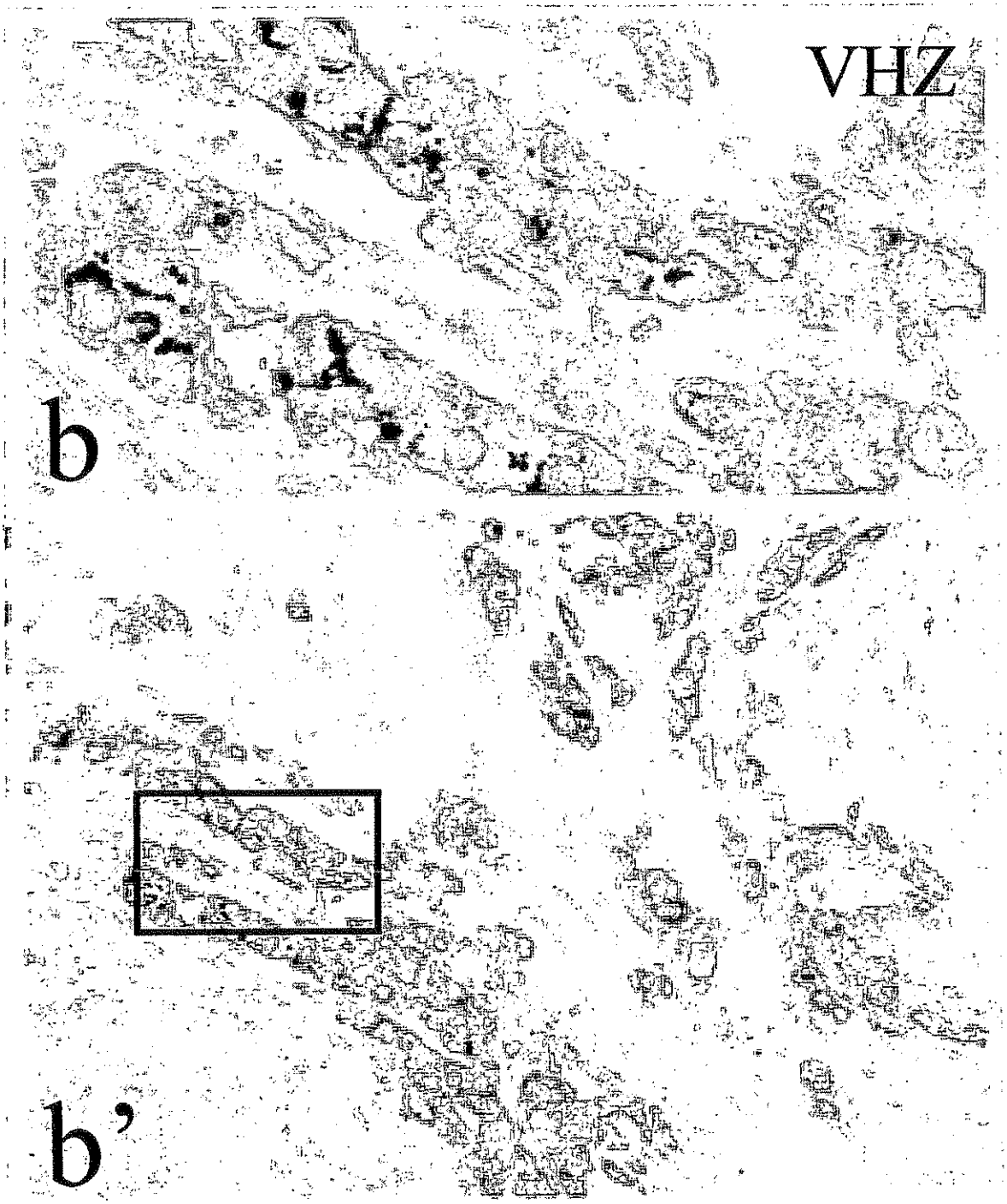


FIGURE 5C (CONTINUED)

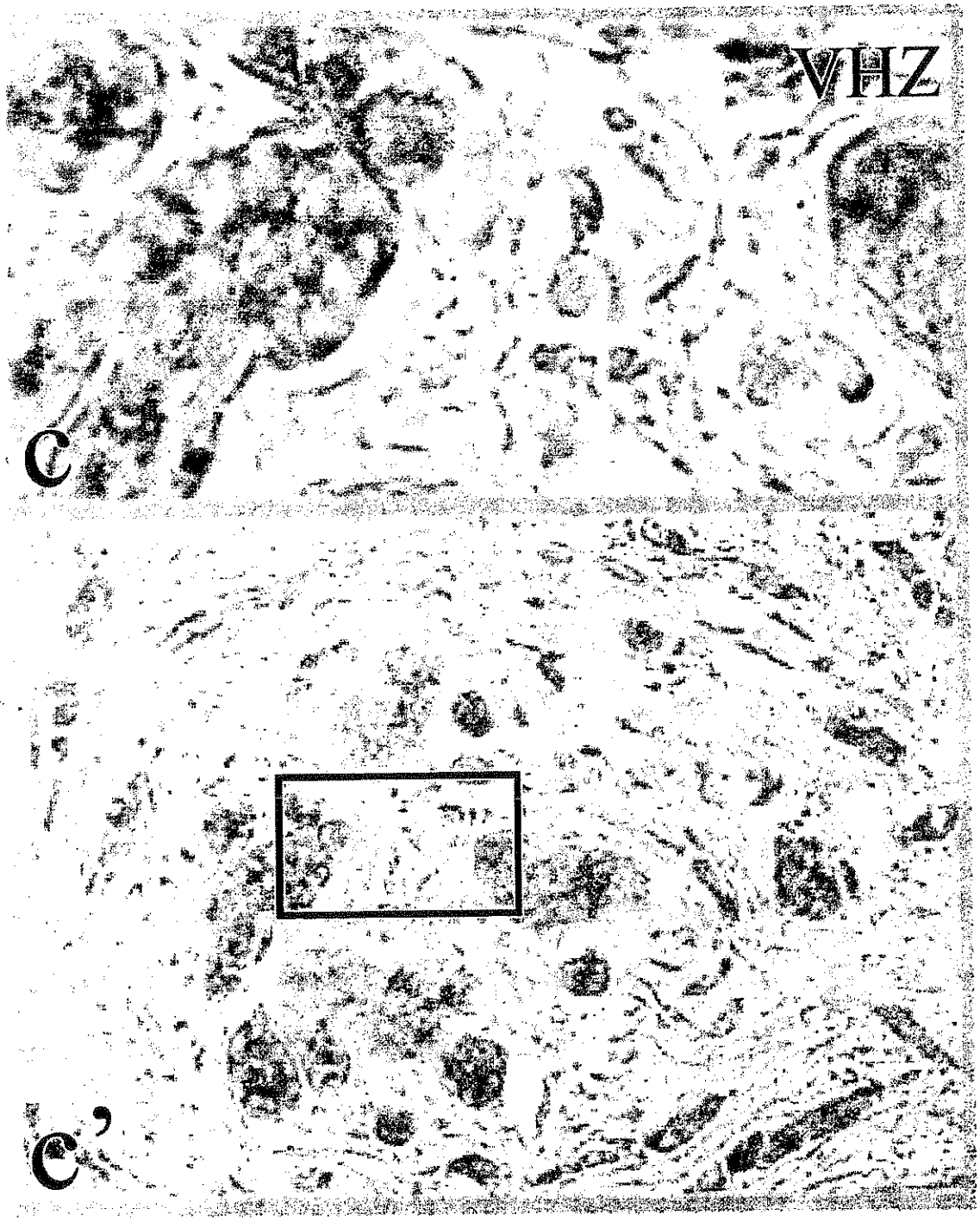


FIGURE 6A

VHZ

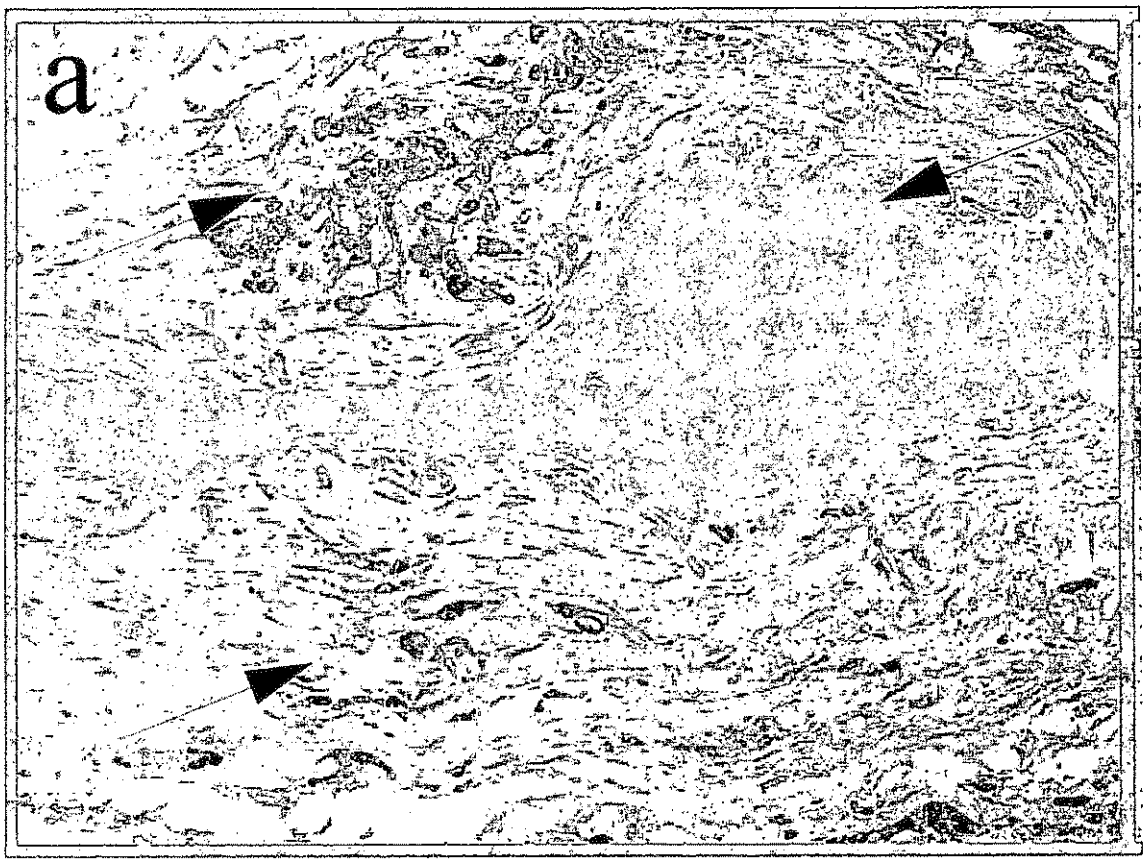


FIGURE 6A (CONTINUED)

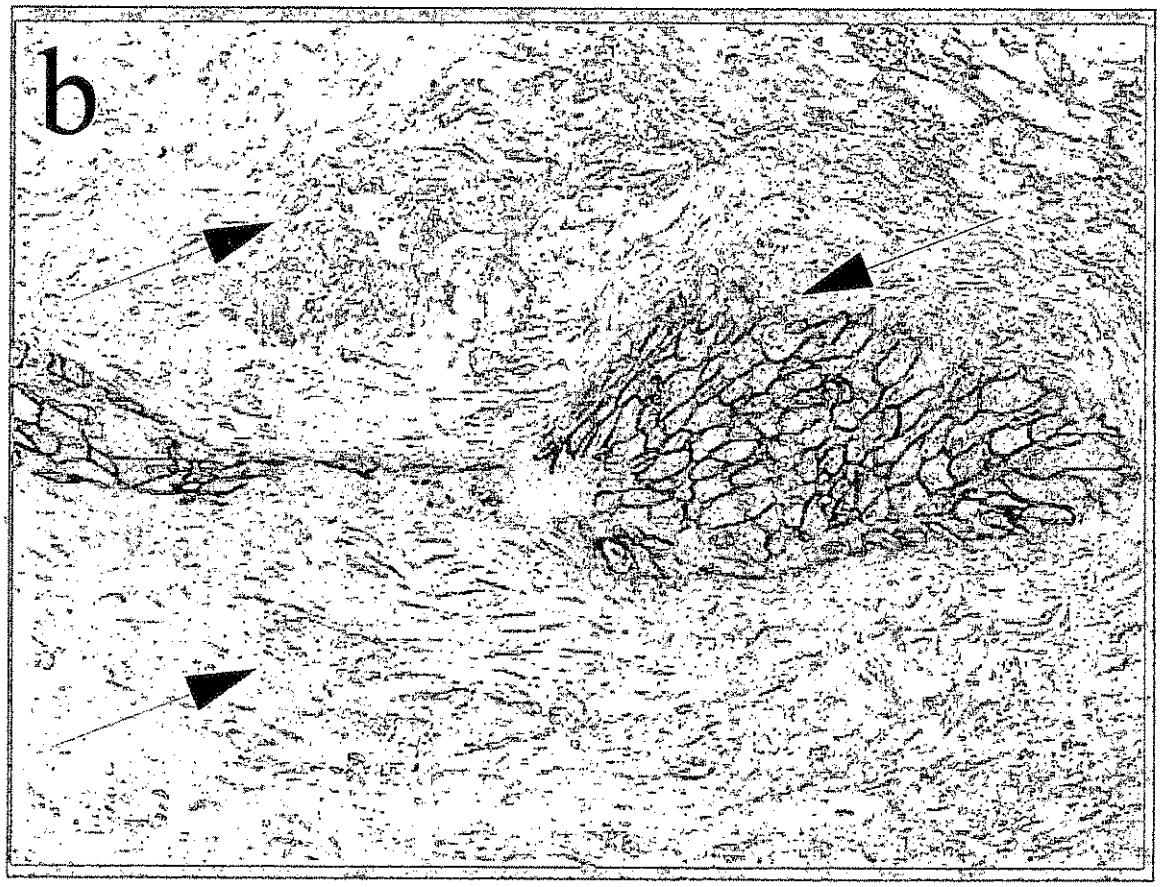
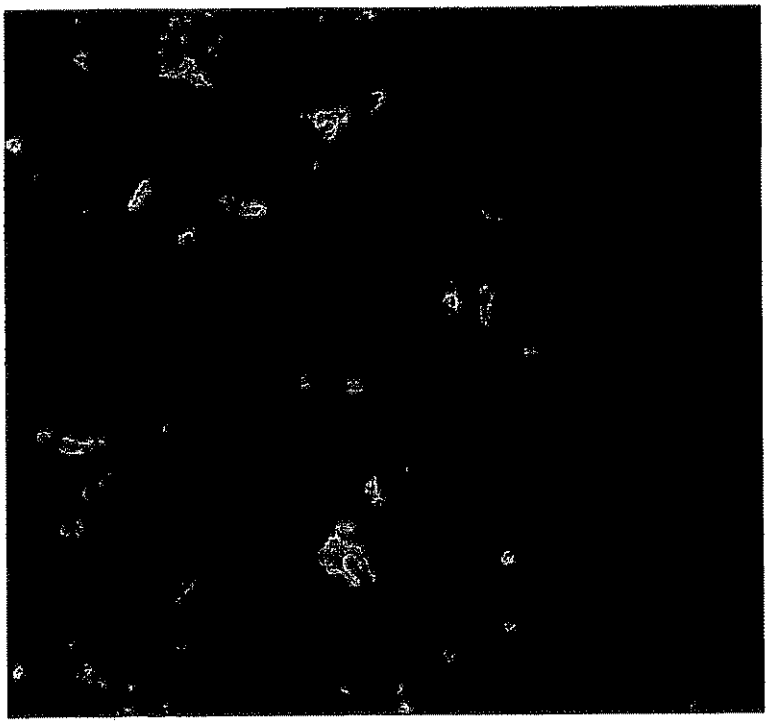


FIGURE 6B

MCF-VHZ-EGFP

0 hr



48 hr

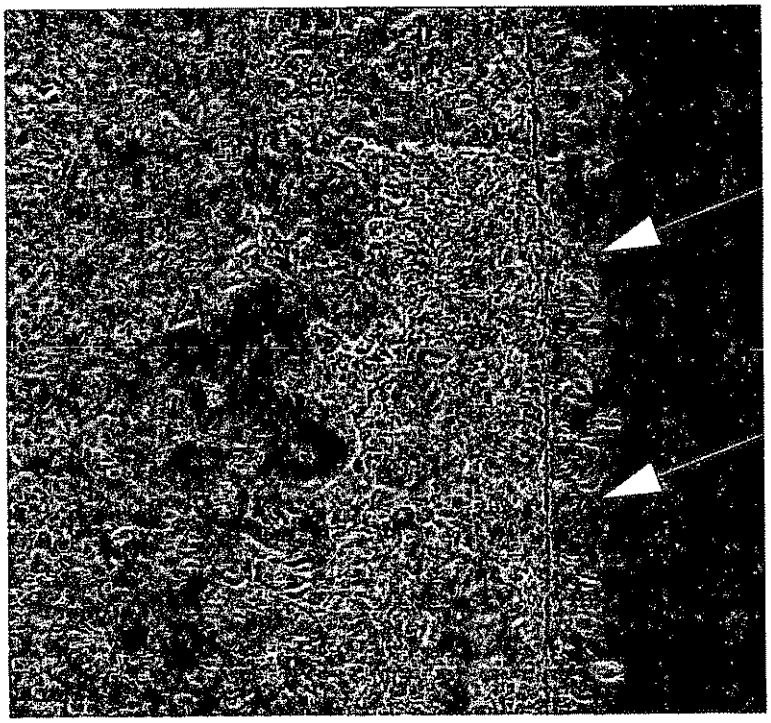


FIGURE 6B (CONTINUED)

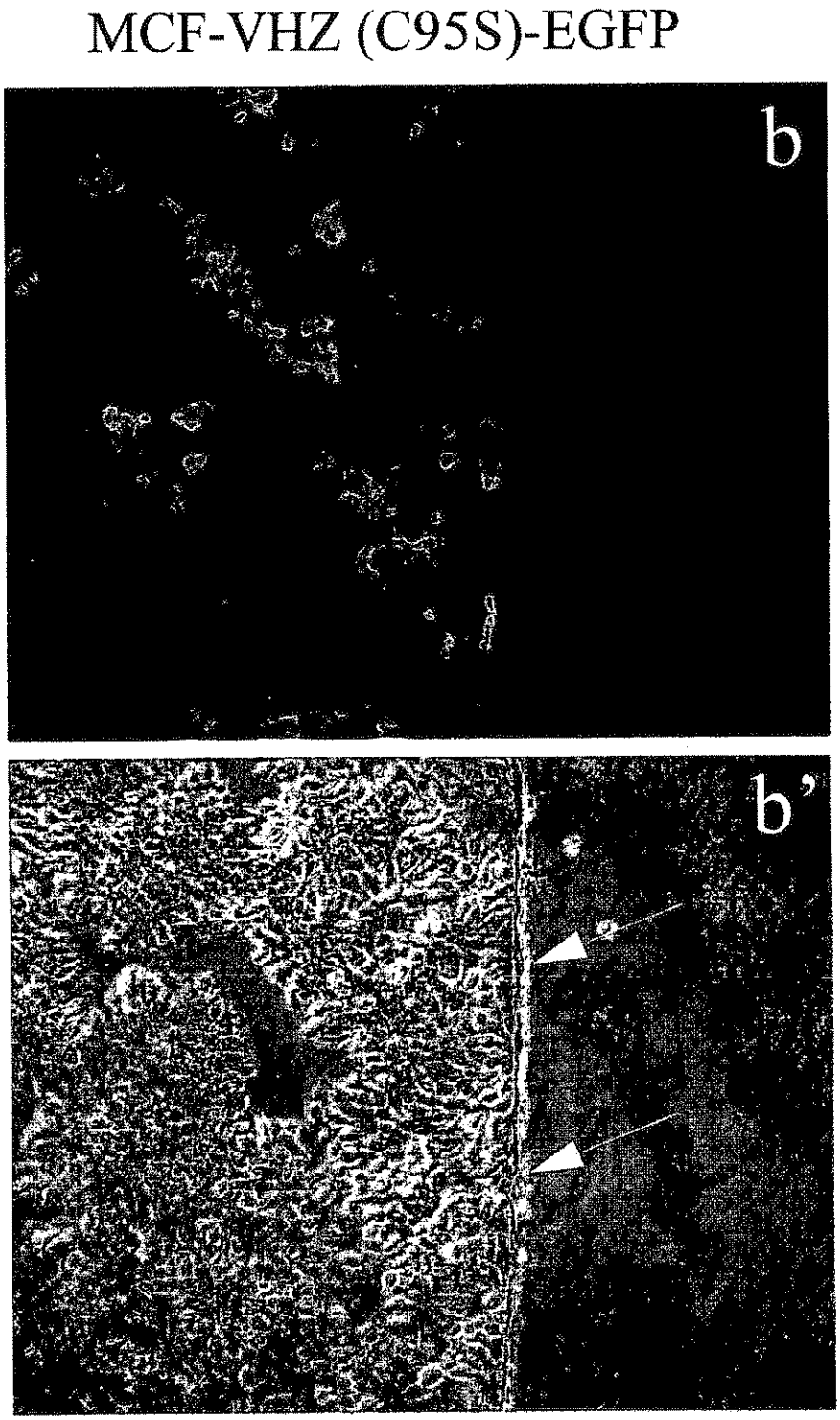


FIGURE 7A

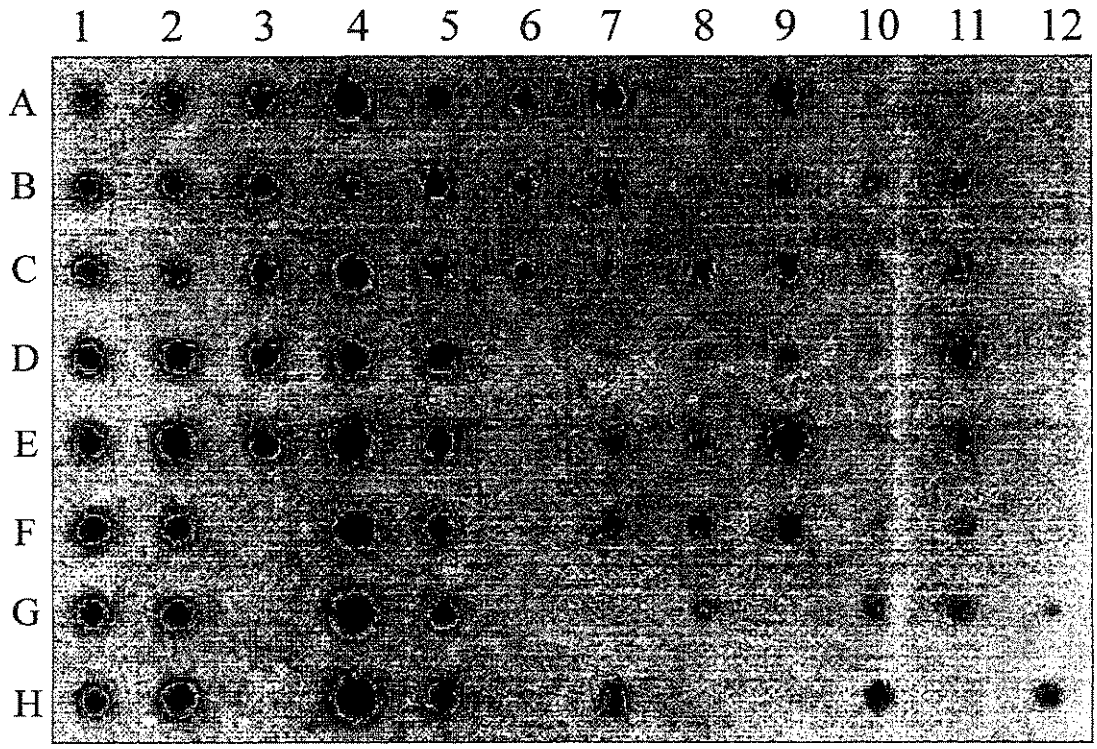


FIGURE 7B

	1	2	3	4	5	6	7	8	9	10	11	12
A	whole brain	cerebellum left		heart	esophagus	colon transverse	kidney	lung	liver	leukemia HL-60	fetal brain	yeast total RNA
B	cerebral cortex	cerebellum right	accumbens nucleus	aorta	stomach	colon descending	skeletal muscle	placenta	pancreas	Hela S3	fetal heart	yeast tRNA
C	frontal lobe	corpus callosum	thalamus	atrium left	duodenum	rectum	spleen	bladder	adrenal gland	leukemia K-562	fetal kidney	*E.coli* rRNA
D	parietal lobe	amygdala		atrium right	jejunum		thymus	uterus	thyroid gland	leukemia MOLT-4	fetal liver	*E.coli* DNA
E	occipital lobe	caudate nucleus	spinal cord	ventricle left	ileum		peripheral blood leukocyte	prostate	salivary gland	Burkitt's lymphoma Raji	fetal spleen	Poly r(A)
F	temporal lobe	hippo-campus		ventricle right	ilocecum		lymph node	testis		Burkitt's lymphoma Daudi	fetal thymus	human Cot 1 DNA
G	p.g of cerebral cortex	medulla oblongata		inter-ventricle septum	appendix		bone marrow	ovary		colorectal adenocarcinoma SW480	fetal lung	human DNA 100ng
H	pons	putamen		apex of the heart	colon ascending		trachea			lung carcinoam A549		human DNA 500ng

FIGURE 8A

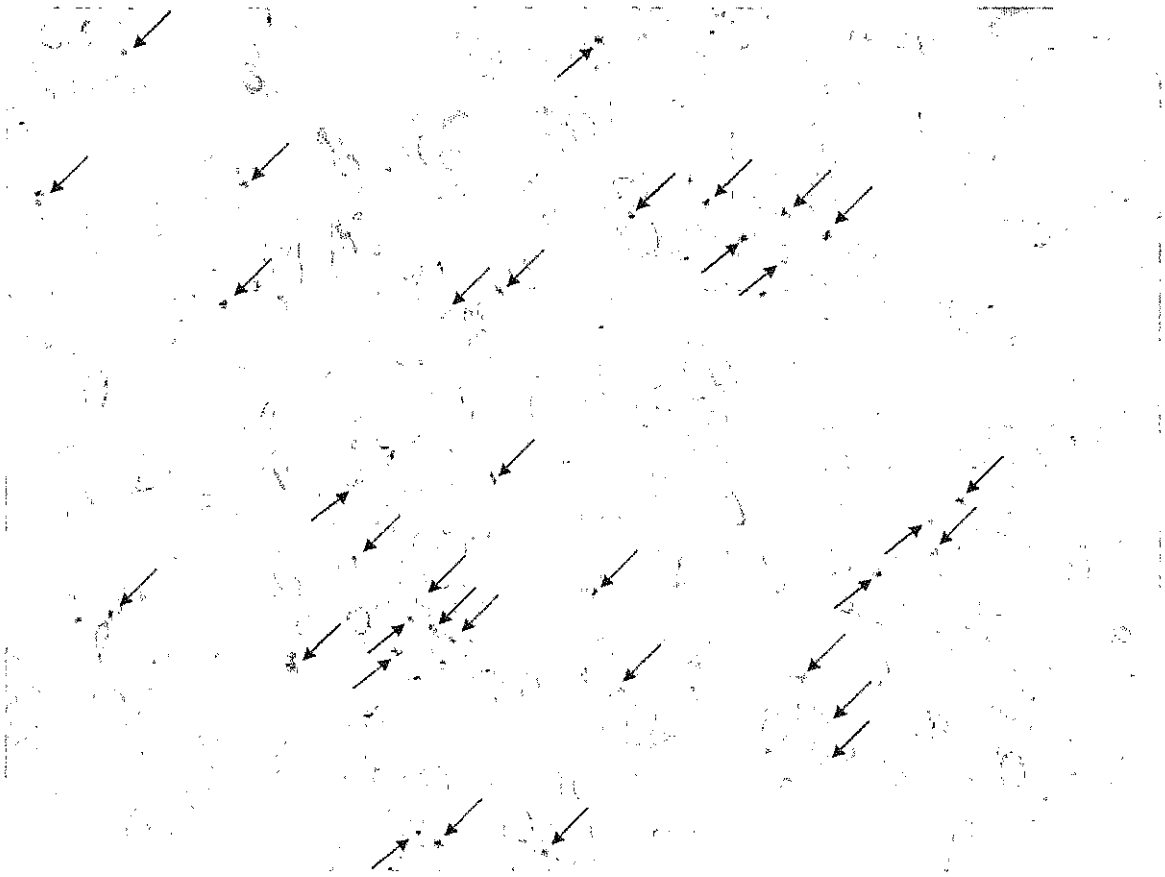


FIGURE 8B

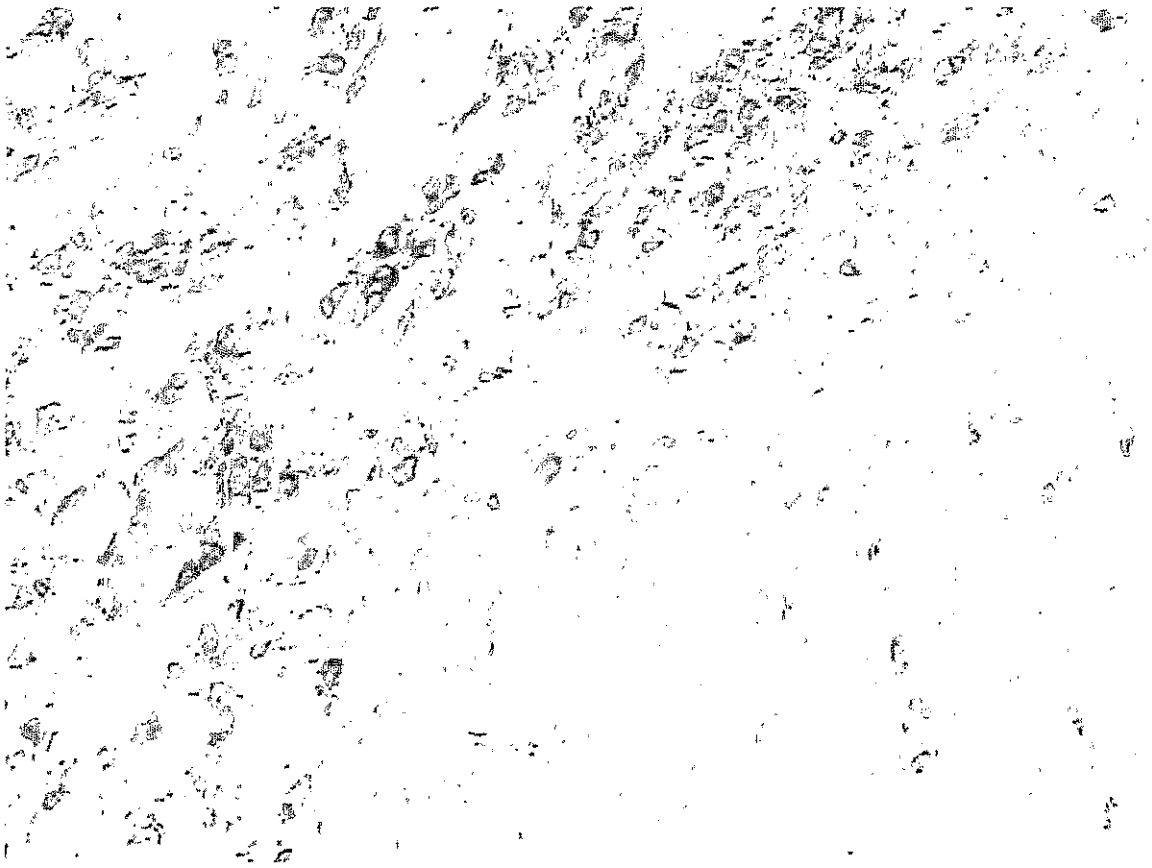


FIGURE 9A



FIGURE 9A (CONTINUED)

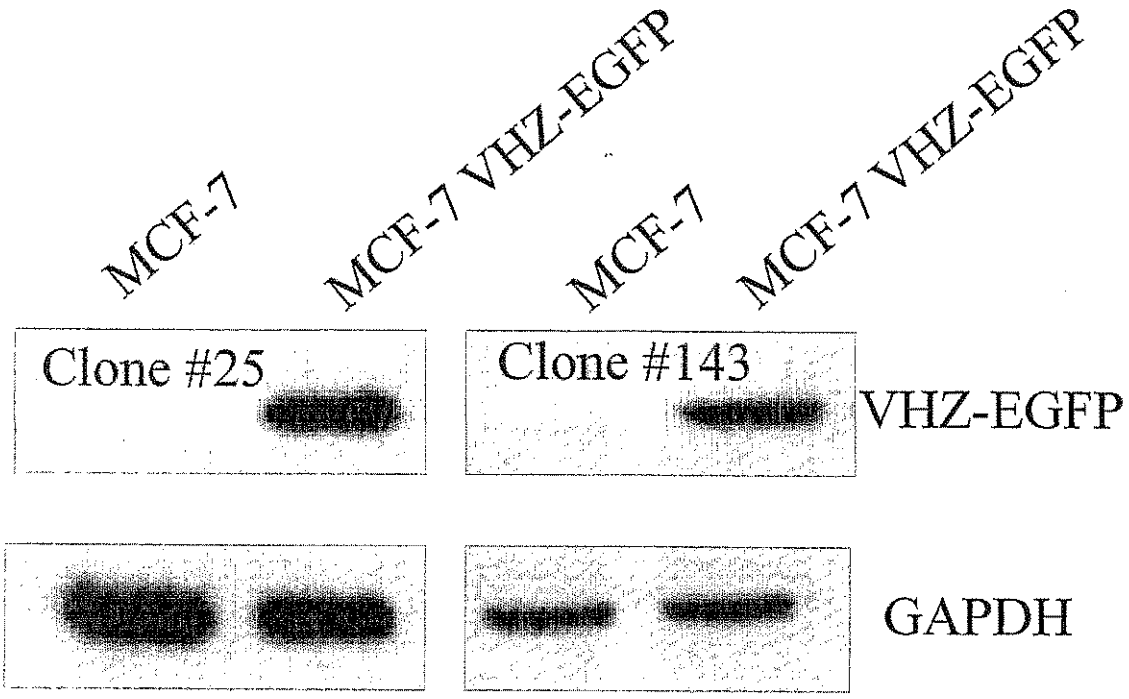


FIGURE 9B

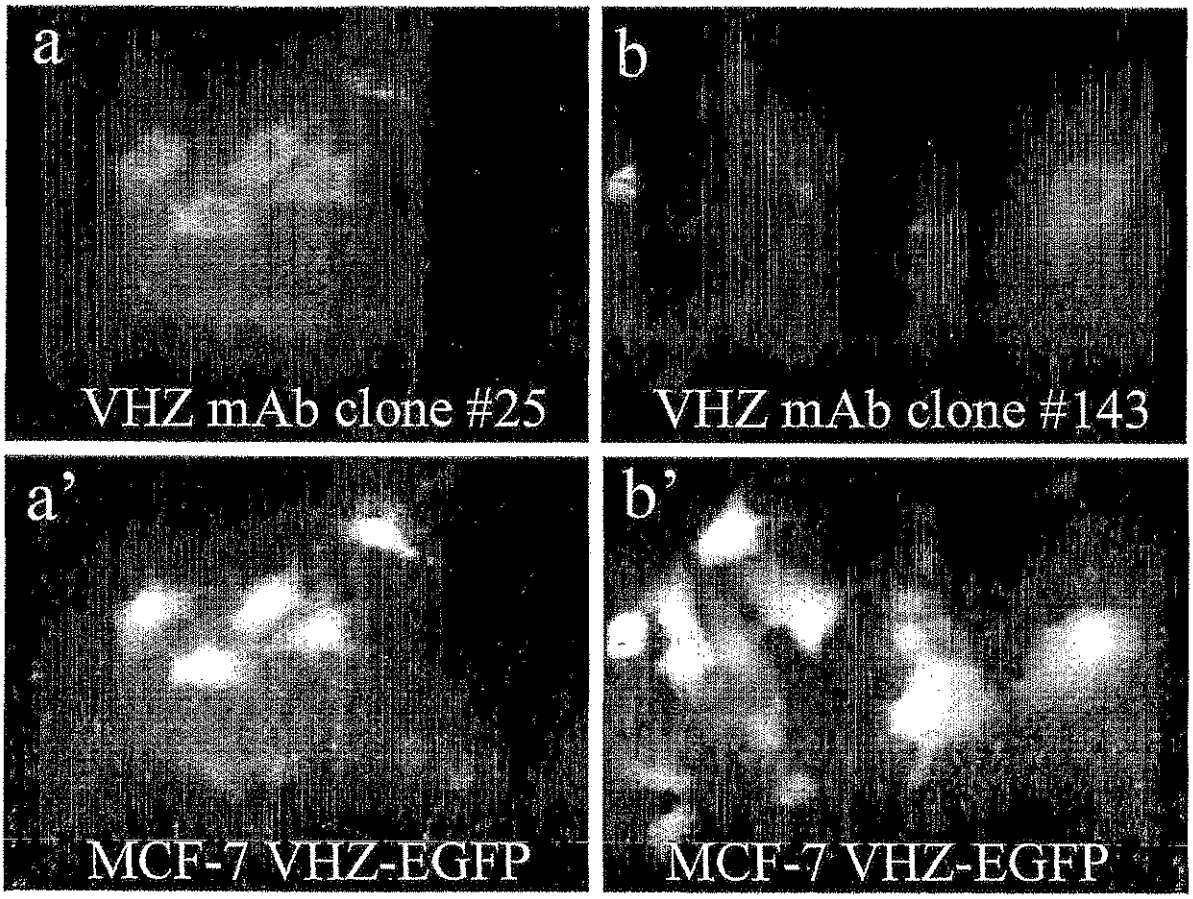

a
VHZ mAb clone #25
b
VHZ mAb clone #143
a'
MCF-7 VHZ-EGFP
b'
MCF-7 VHZ-EGFP

FIGURE 10 AND FIGURE 11

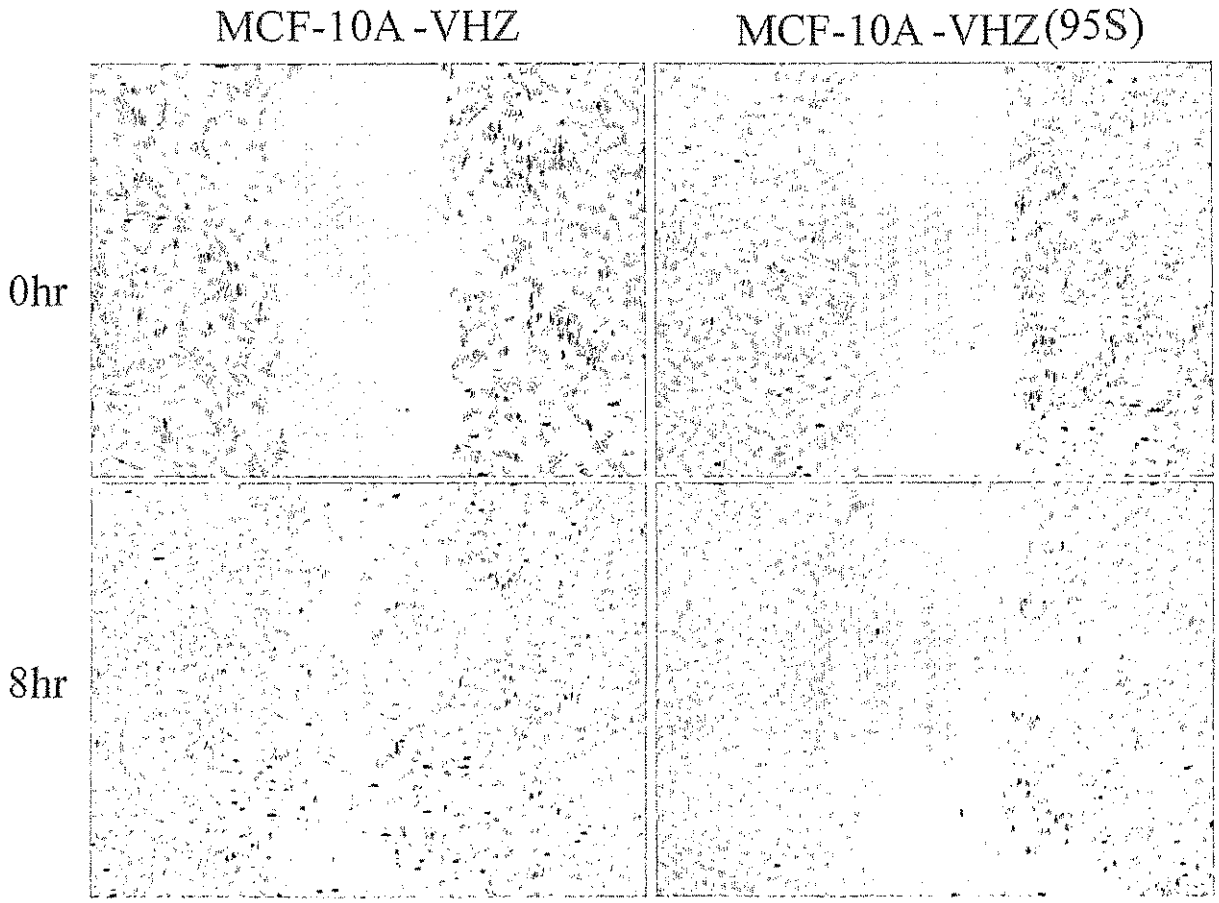


FIGURE 12A



FIGURE 12B



FIGURE 12C

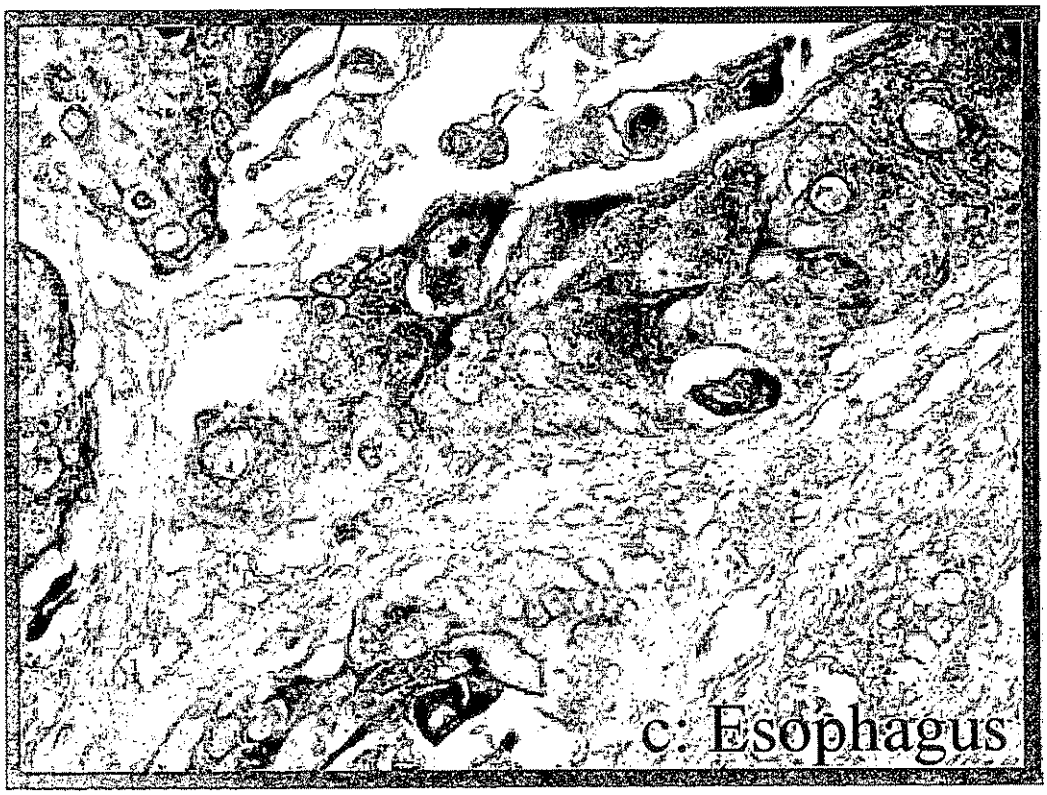


FIGURE 12D

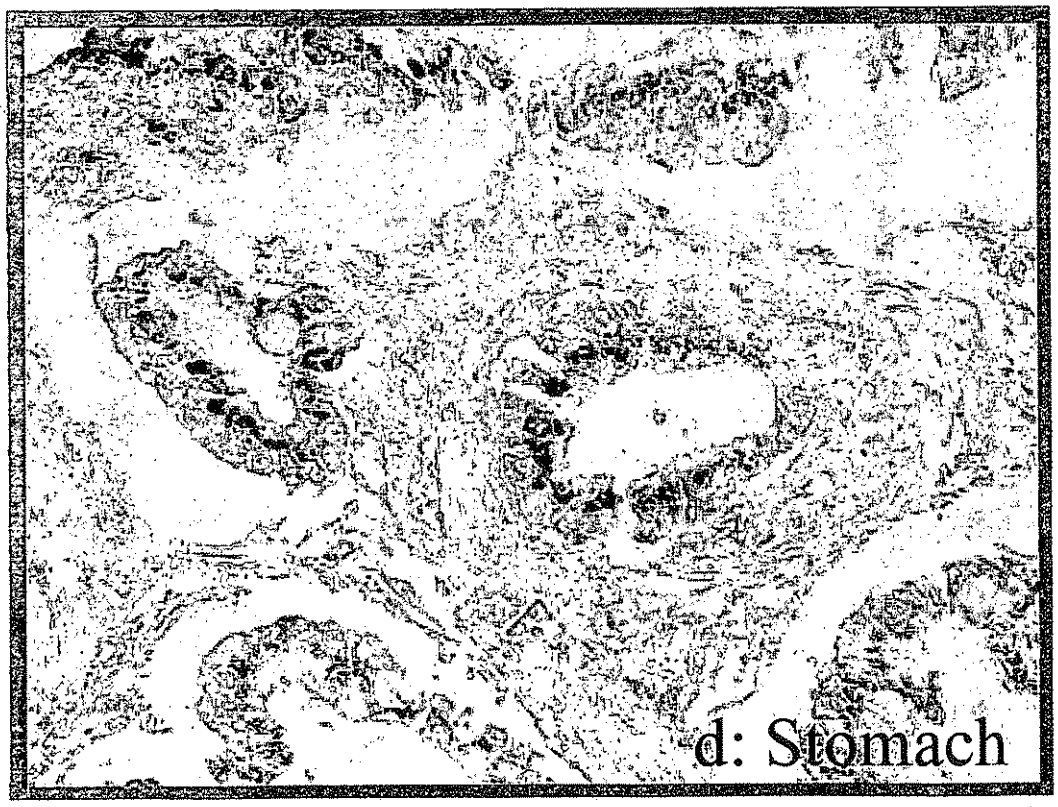


FIGURE 12E

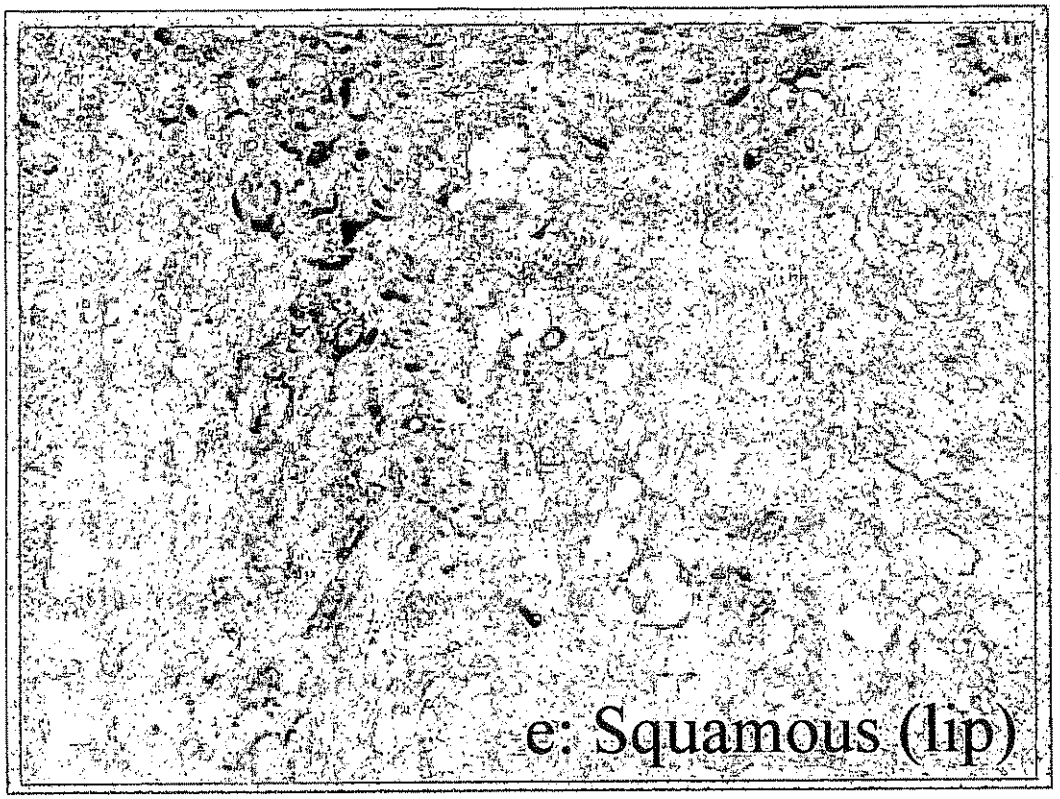


FIGURE 12F

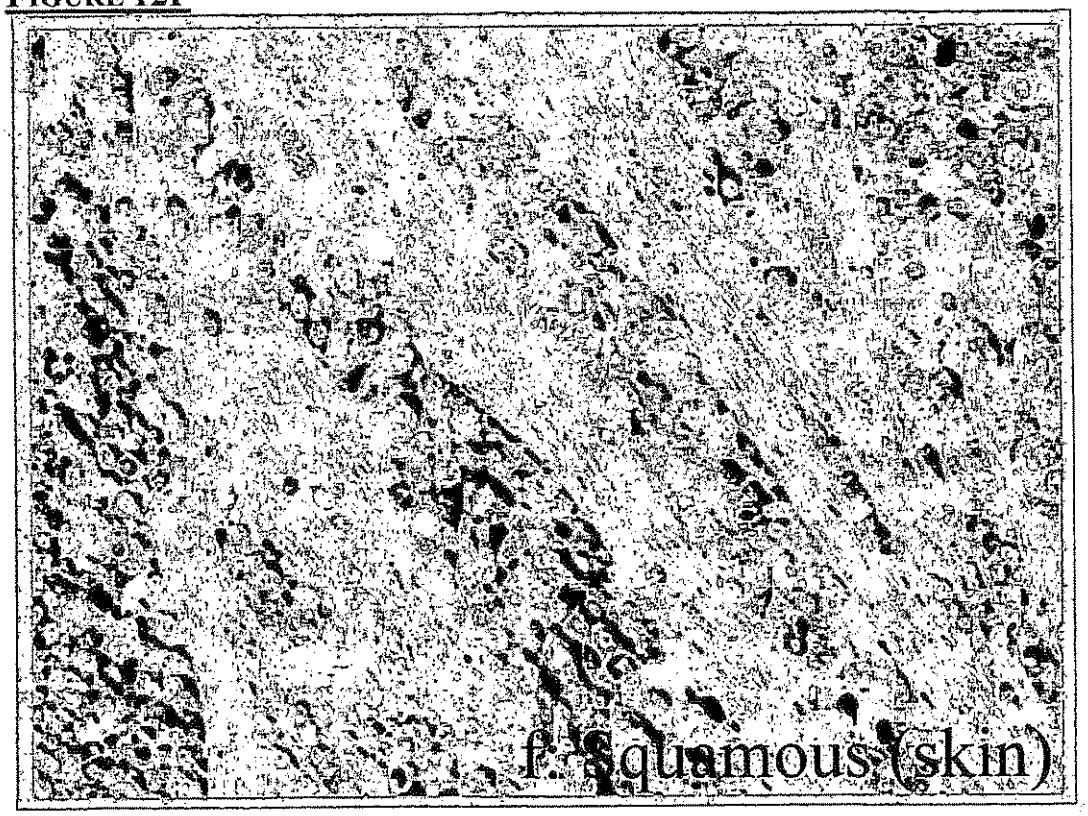
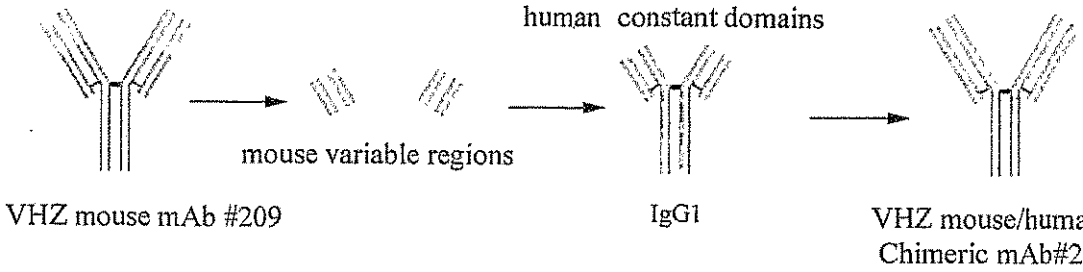


FIGURE 13A



B

Variable Heavy Chain Sequence:

LVDMDSRLNLVFLVLILKGVQCDVQLVESGGGLVQPGGSRKLSCAASGFTFS
SFGMHWVRQAPEKGLEWVAYISSGSSTIYYADTVKGRFTISRDNPKNTLFLQ
MTSLRSEDTAMYYCARWQTARATRGYAMDYWGQGTSVTVSS

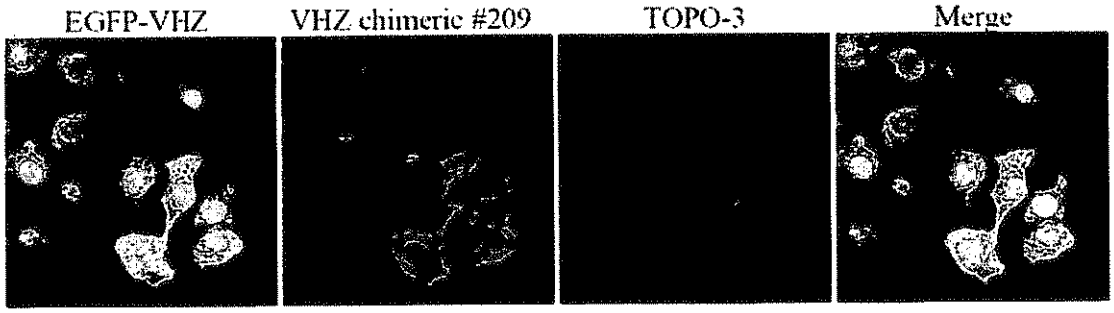
C

Variable Light Chain Sequence:

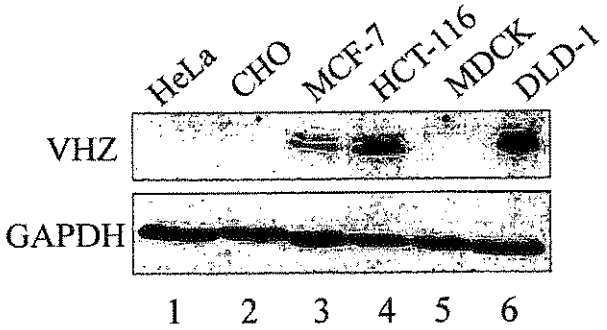
VMTQSHKFMSTSVGDRVSITCKASQDVNTAVAWYQQKPGQSPKLLIYSASYRFT
GVPDLFTGSGSGTDFTFTINSVQAEDLAVYYCQQHYSSPWTFGGGTKLEIKRAD
AAPTVSIFHHPVSLG

FIGURE 14

A



B (in cell lines)



C (in mouse tissues)

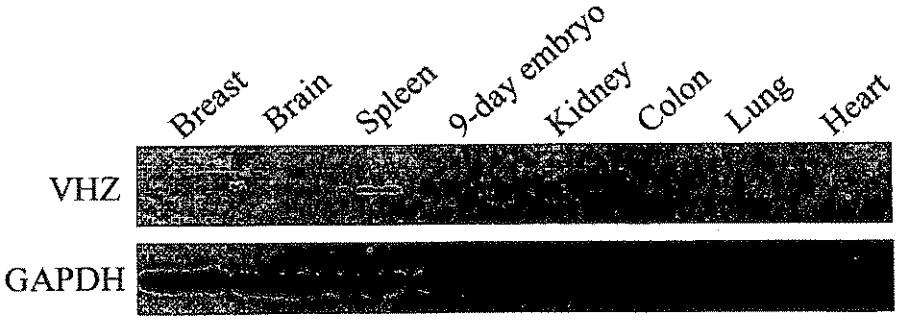


FIGURE 15A

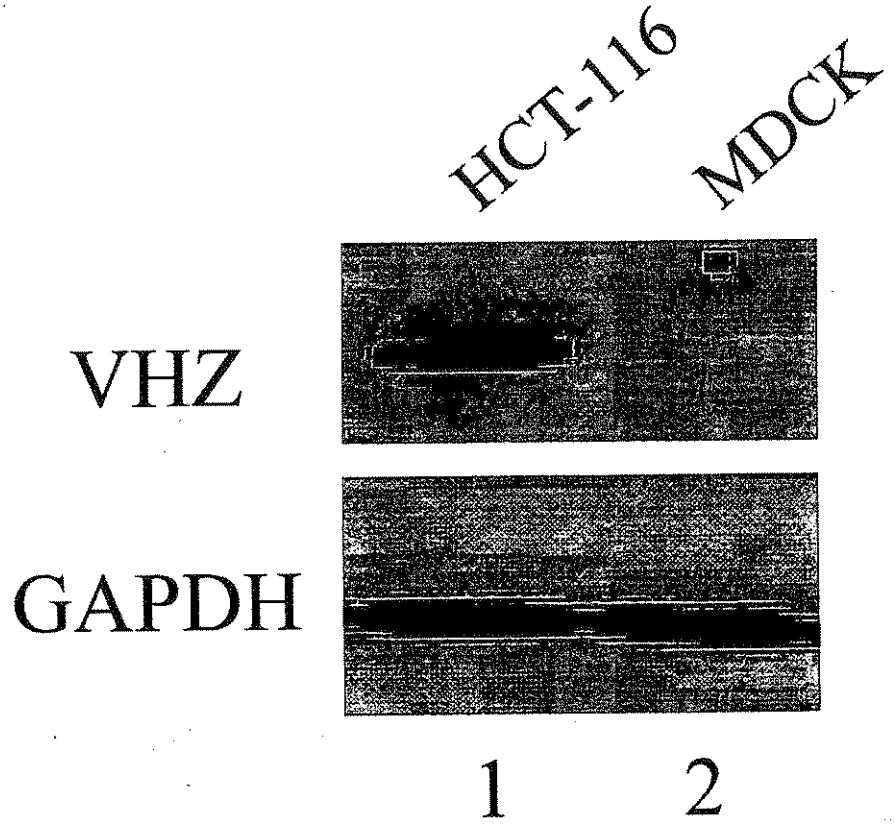
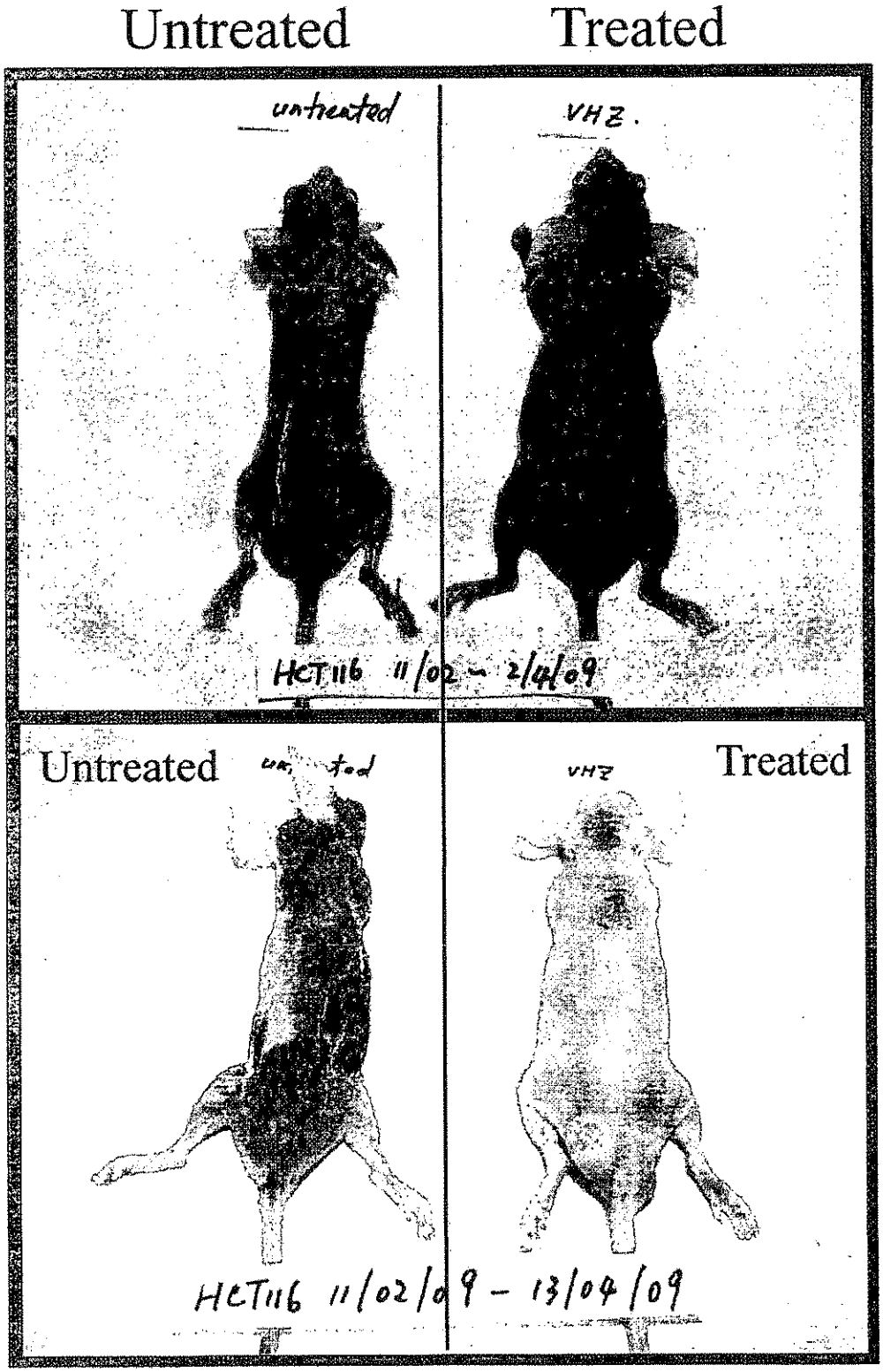


FIGURE 15B


Untreated
Treated
untreated
VHZ.
HCT116 11/02 - 2/4/09
Untreated
Treated
VHZ
HCT116 11/02/09 - 13/04/09