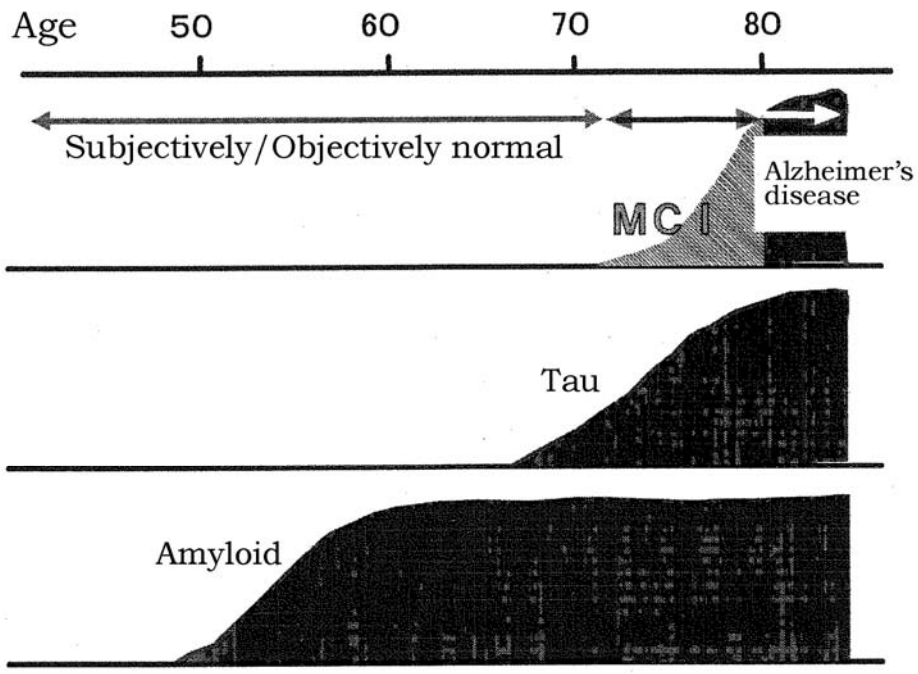

Age
50
60
70
80
Subjectively/Objectively normal
MCI
Alzheimer's disease
Tau
Amyloid

FIG. 1

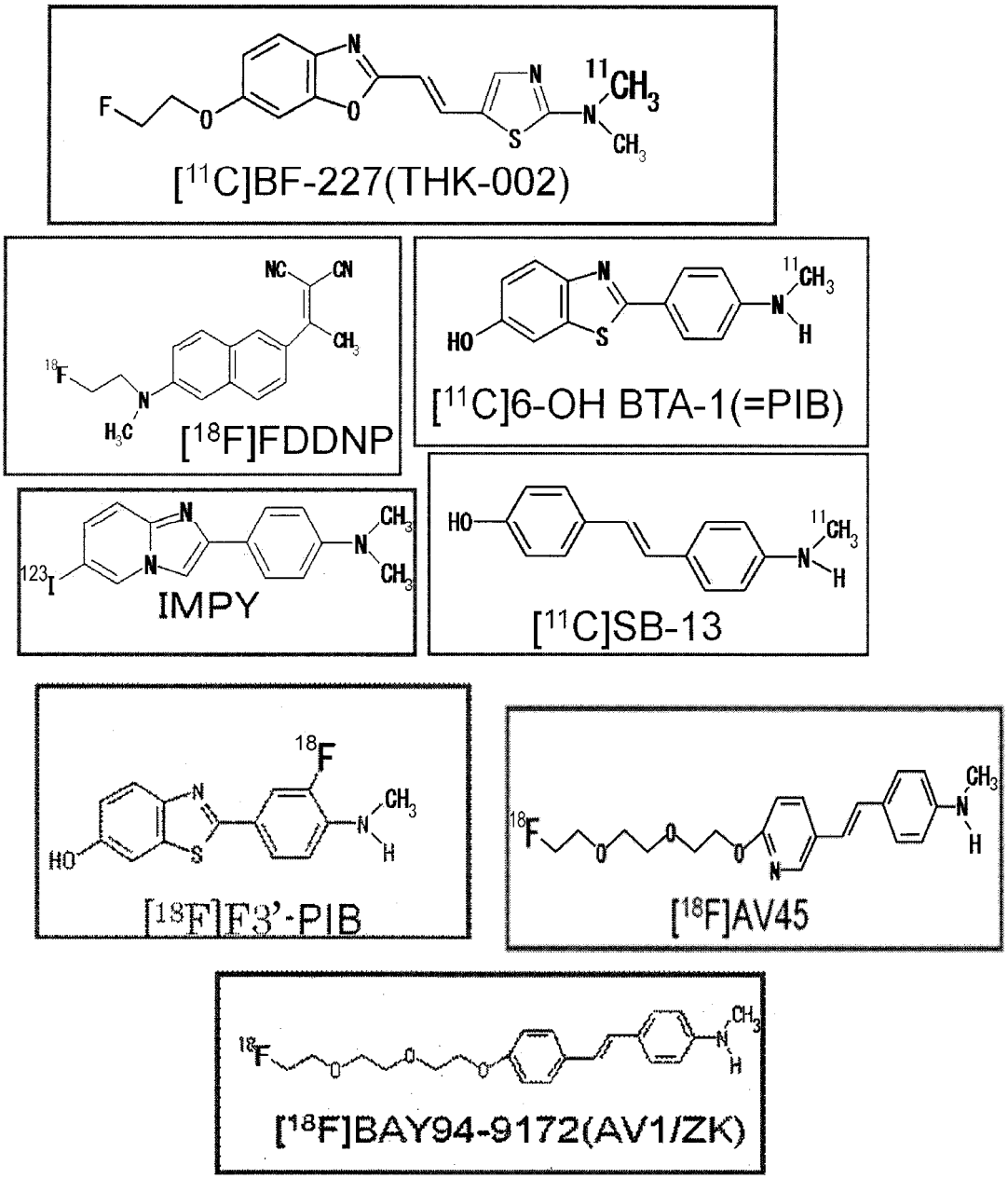

[11C]BF-227(THK-002)
[18F]FDDNP
[11C]6-OH BTA-1(=PIB)
IMPY
[11C]SB-13
[18F]F3'-PIB
[18F]AV45
[18F]BAY94-9172(AV1/ZK)

FIG. 2

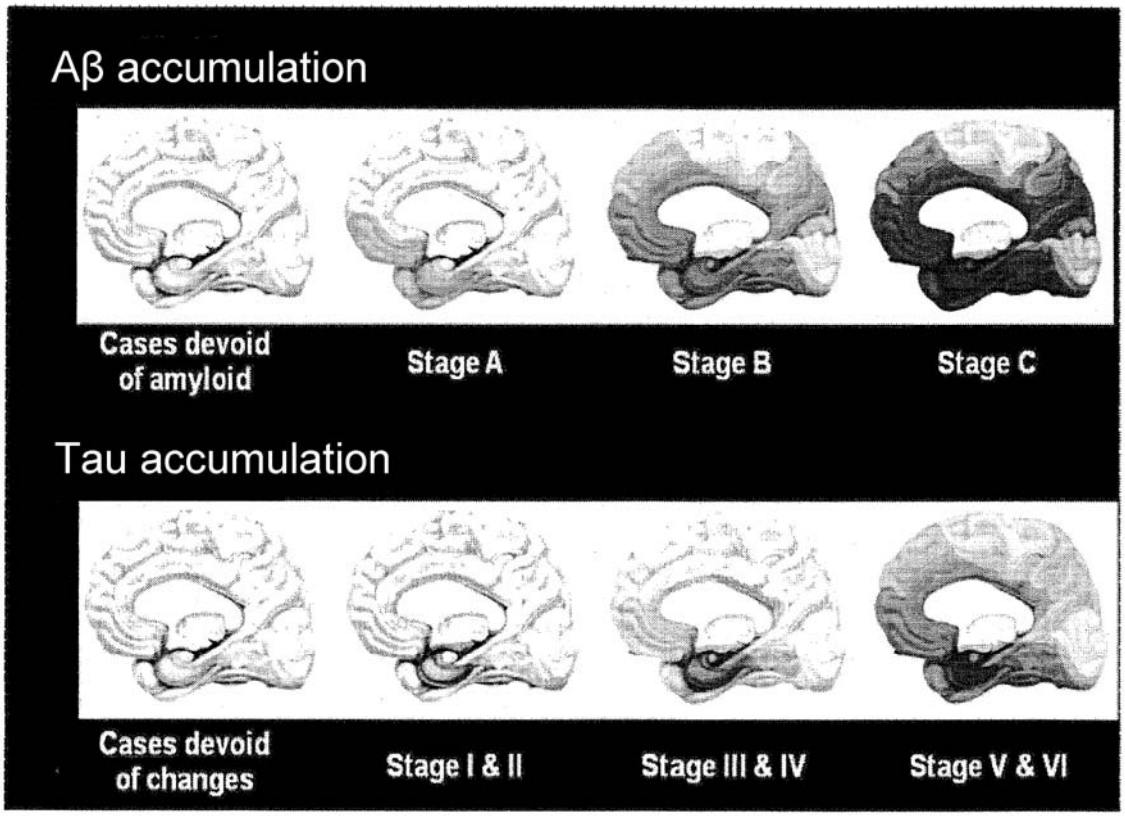

Aβ accumulation
Cases devoid of amyloid
Stage A
Stage B
Stage C
Tau accumulation
Cases devoid of changes
Stage I & II
Stage III & IV
Stage V & VI

FIG. 3

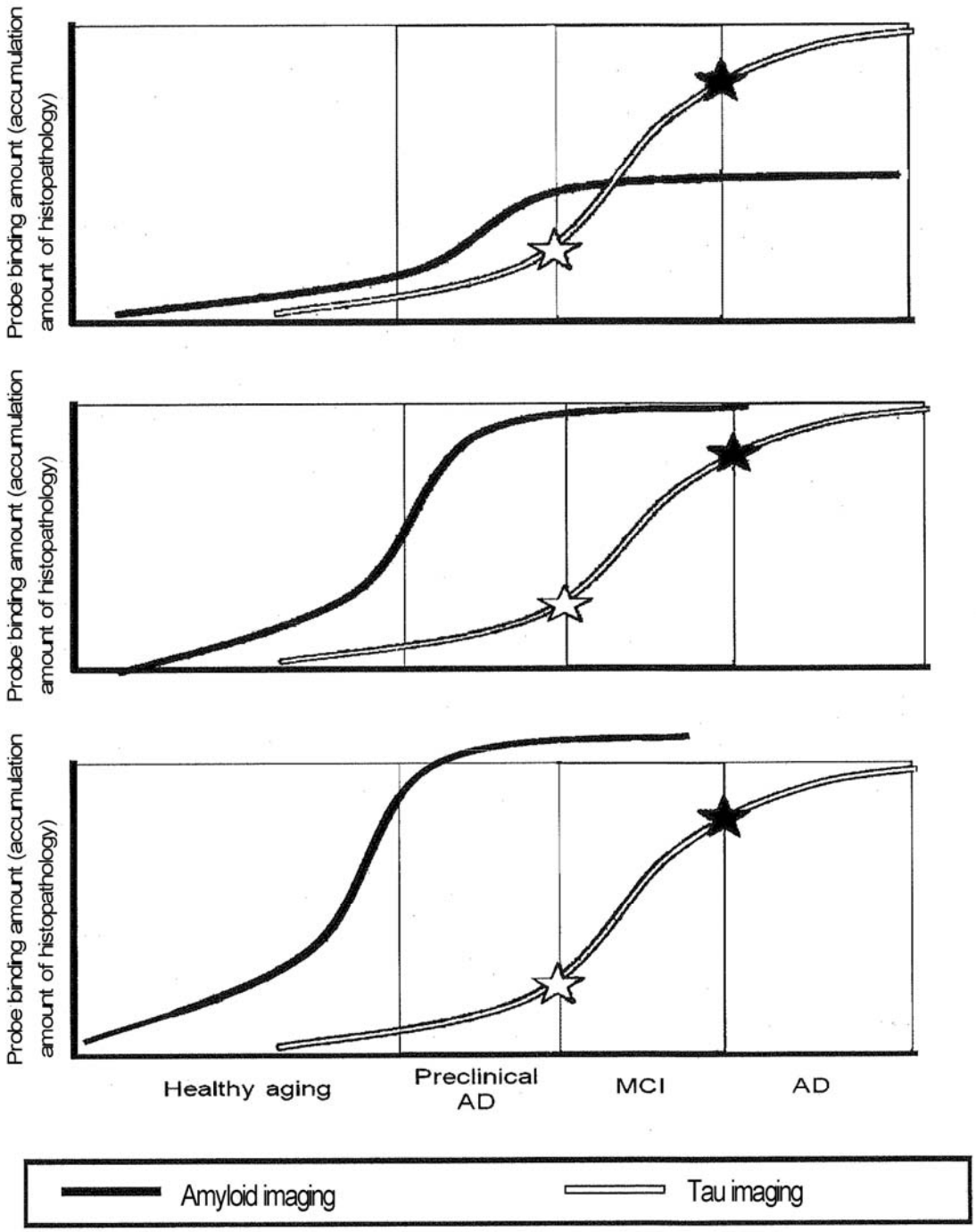

Probe binding amount (accumulation amount of histopathology)
Probe binding amount (accumulation amount of histopathology)
Probe binding amount (accumulation amount of histopathology)
Healthy aging
Preclinical AD
MCI
AD
Amyloid imaging
Tau imaging

FIG. 4

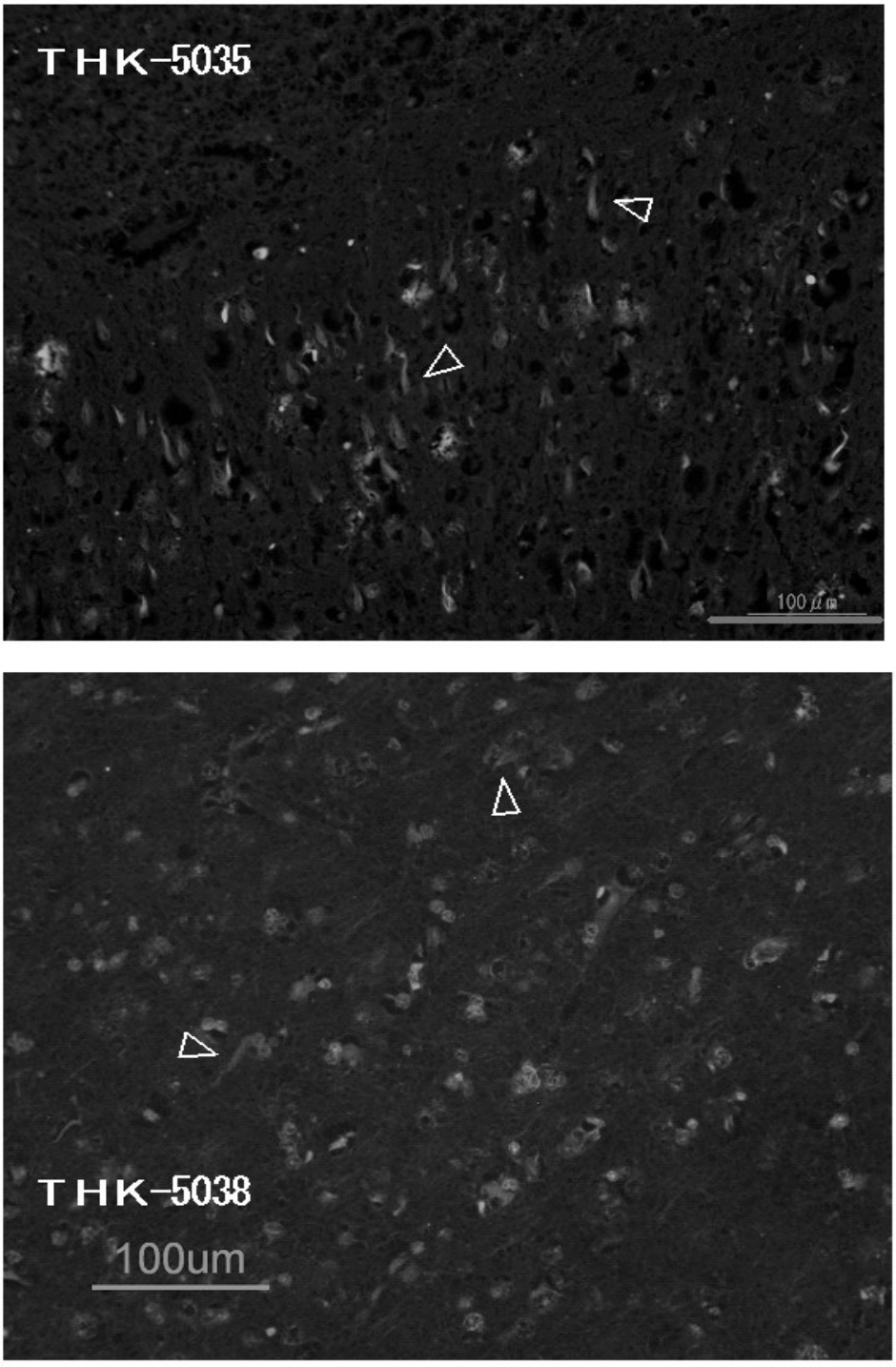


FIG. 5

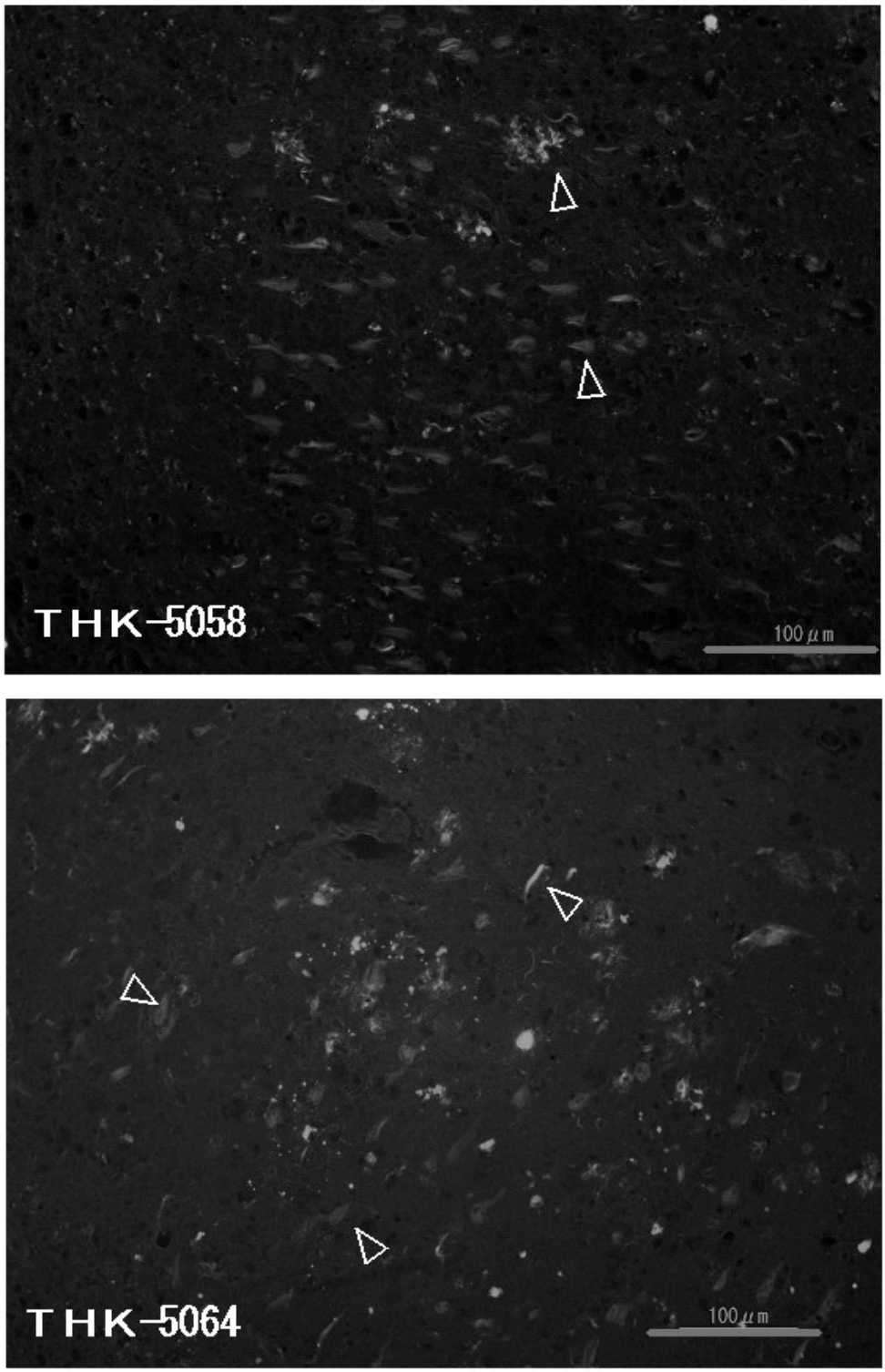


FIG. 6

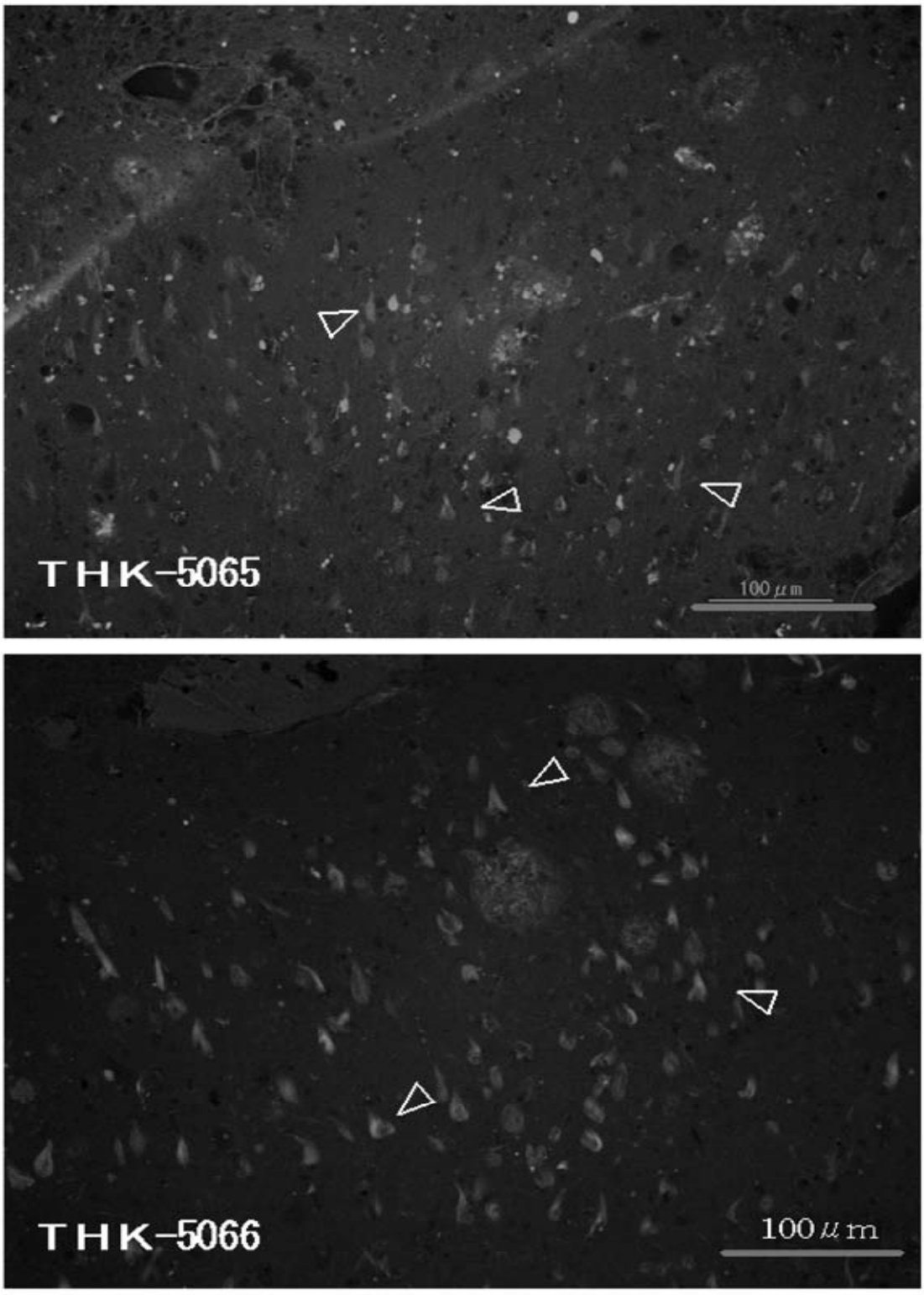


FIG. 7

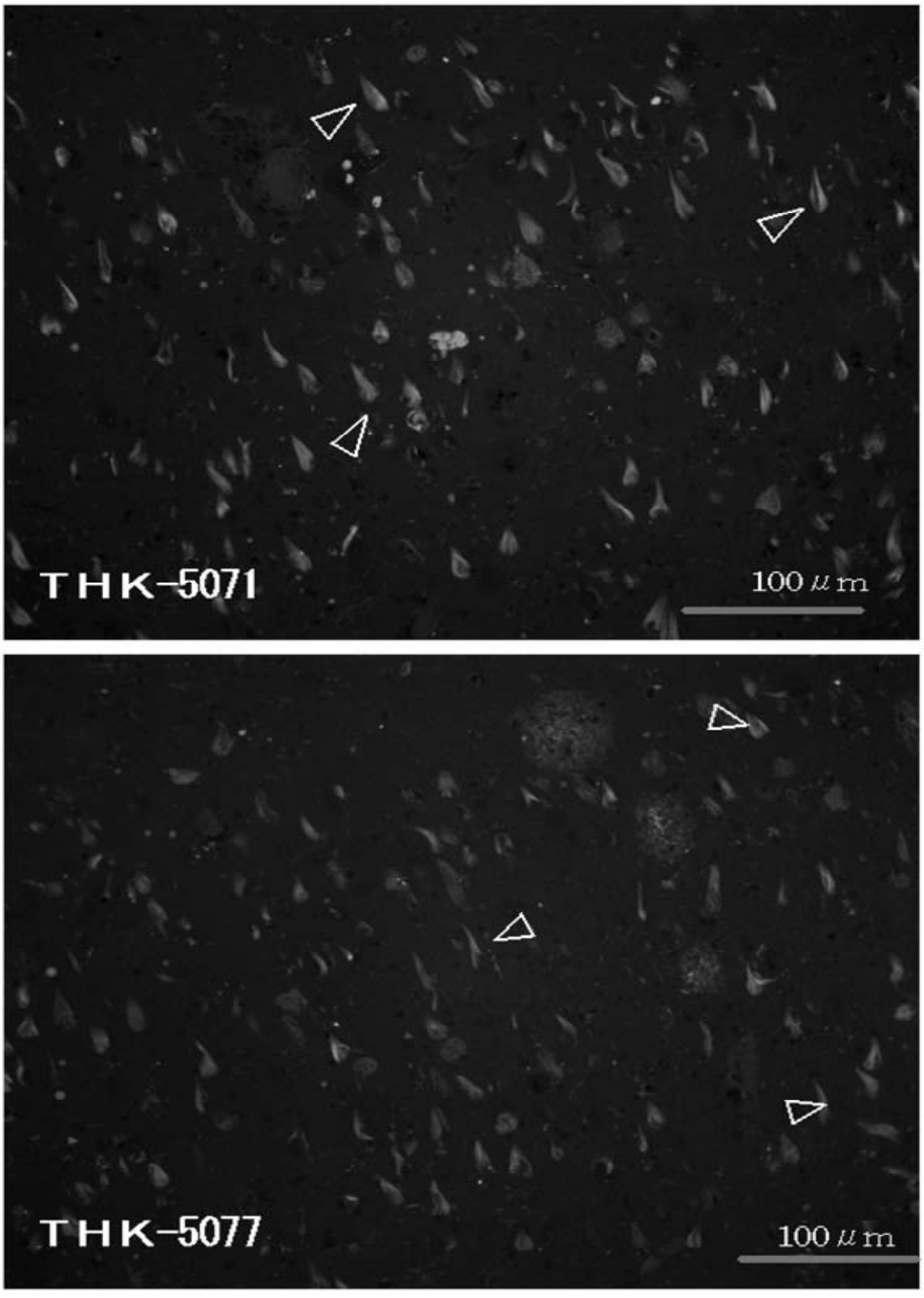


FIG. 8

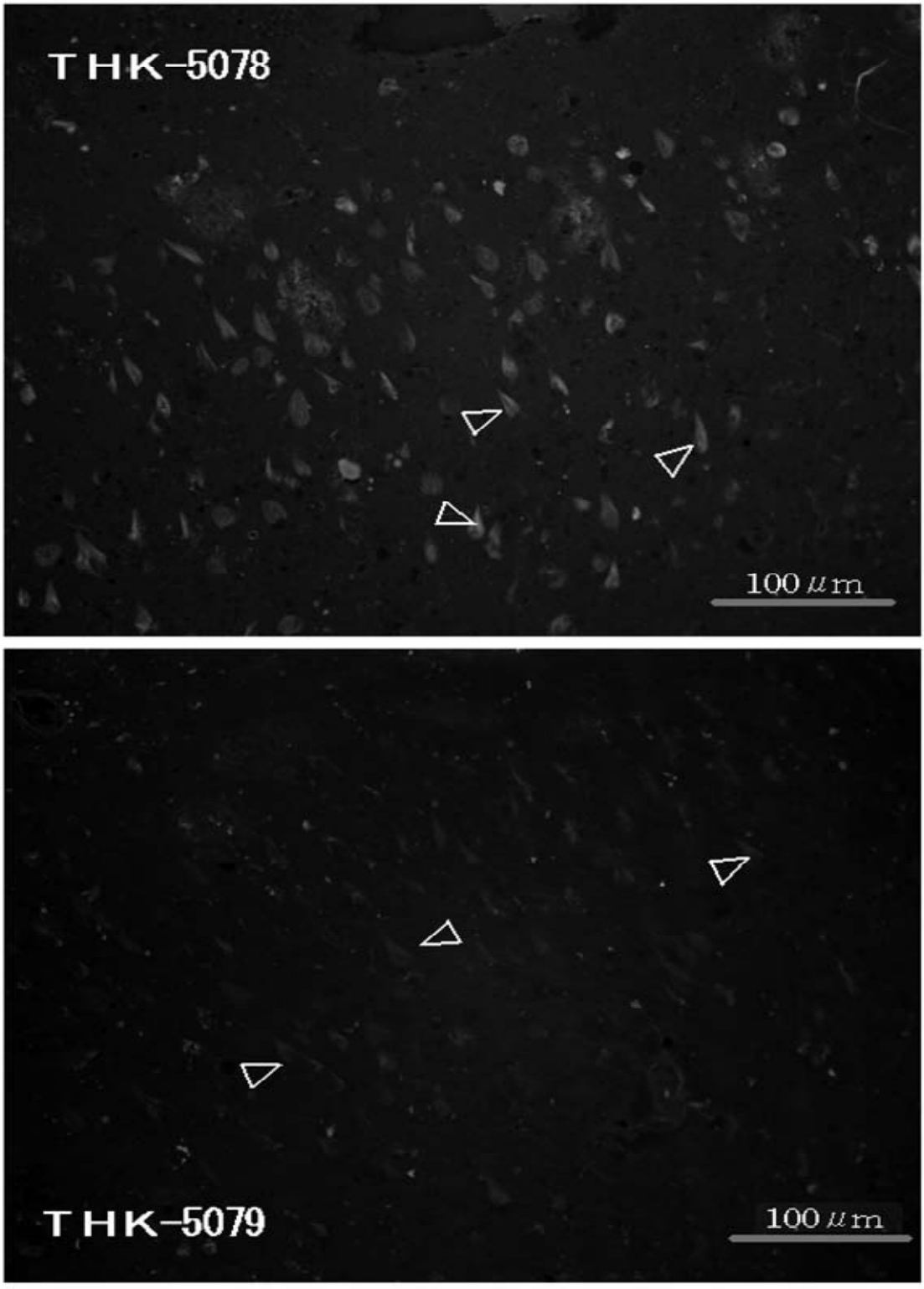


FIG. 9

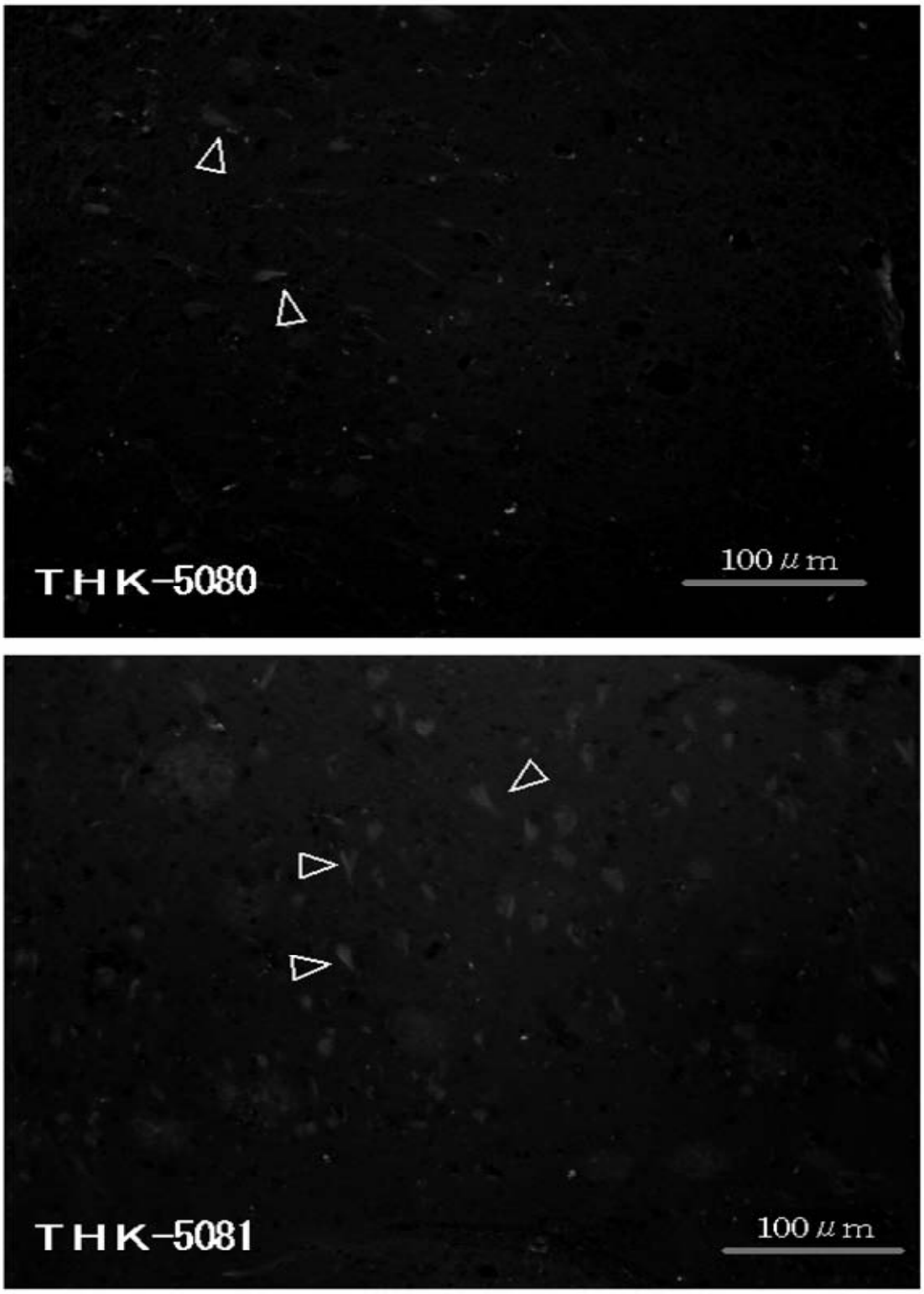


FIG. 10

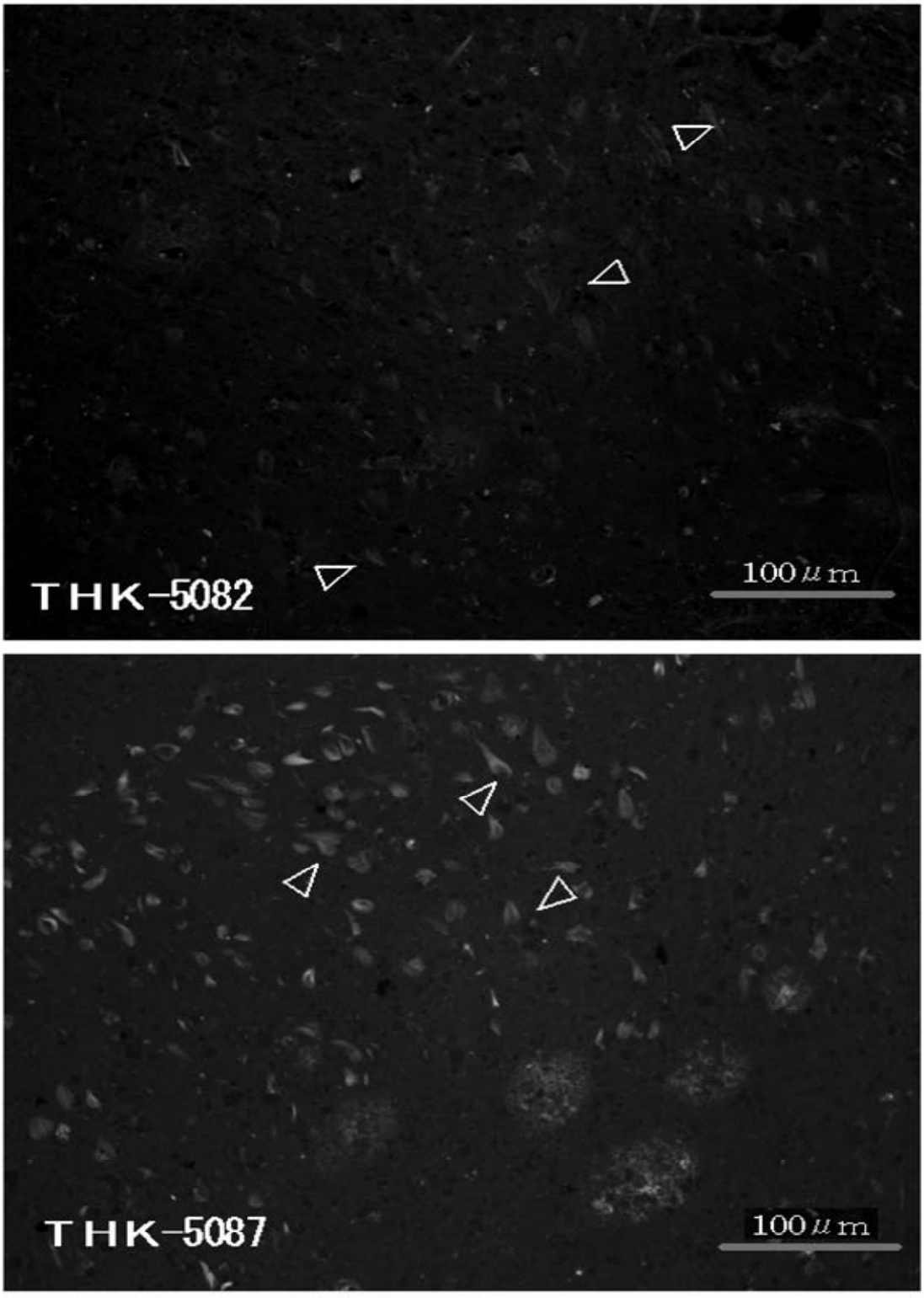


FIG. 11

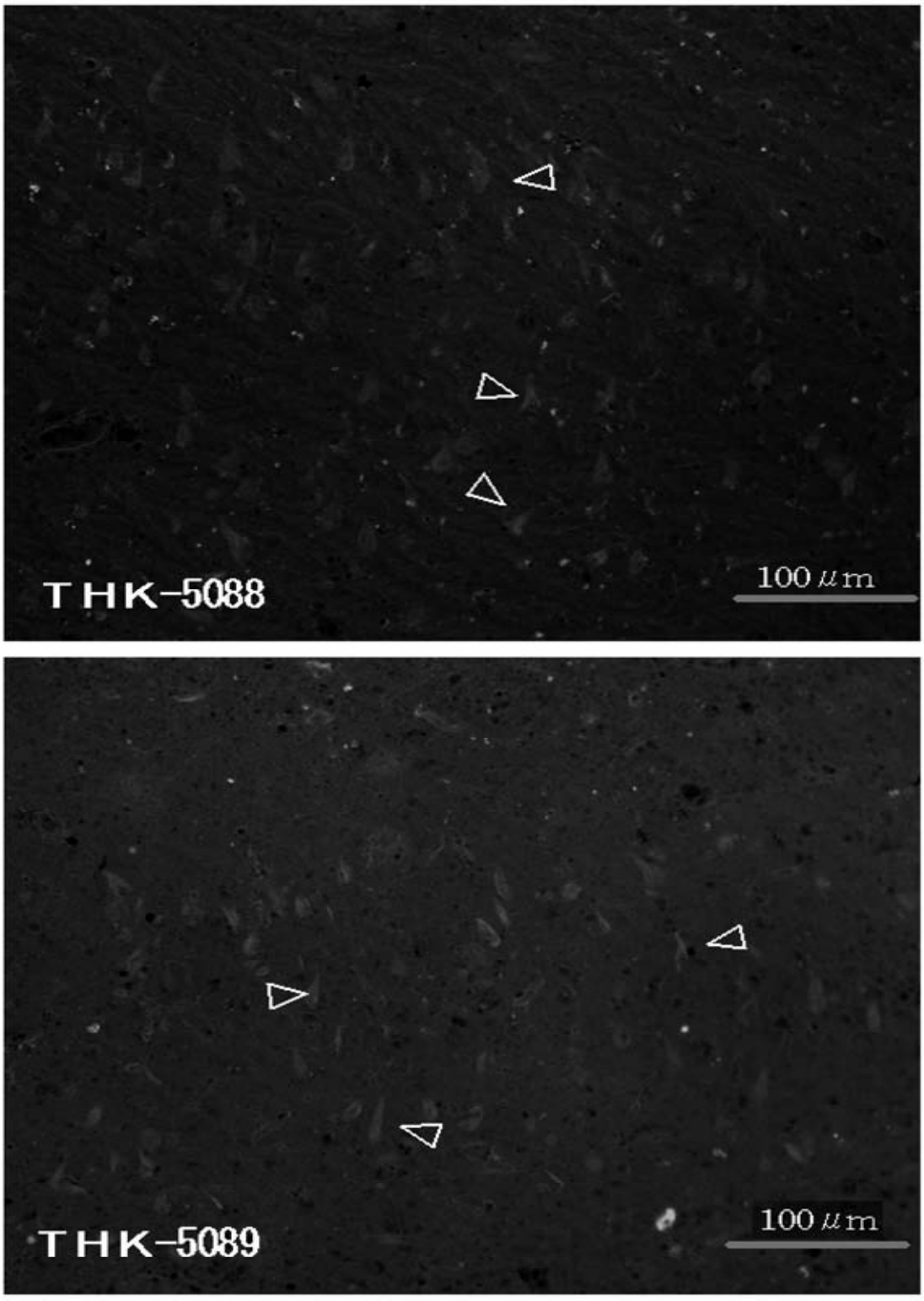


FIG. 12

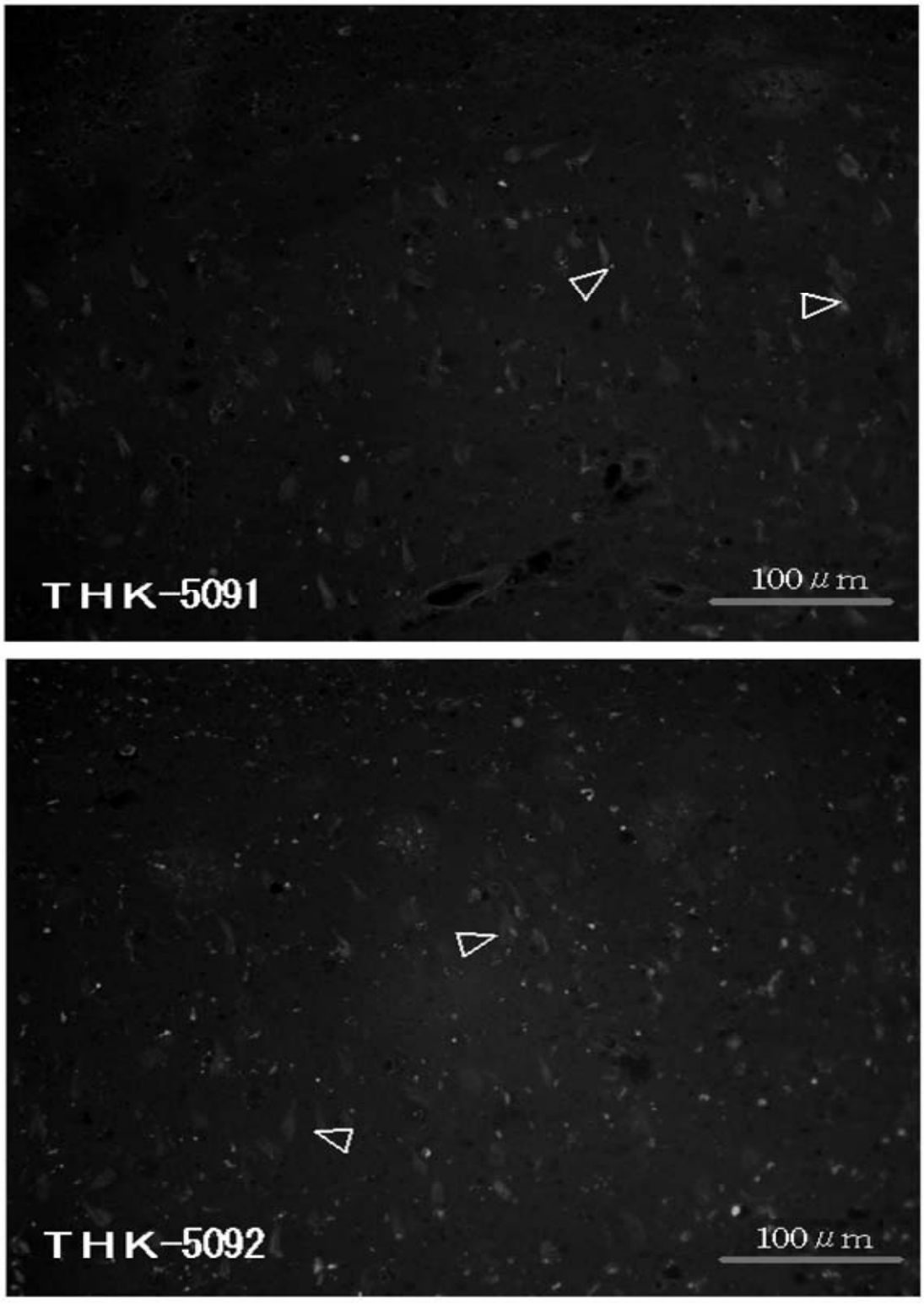


FIG. 13

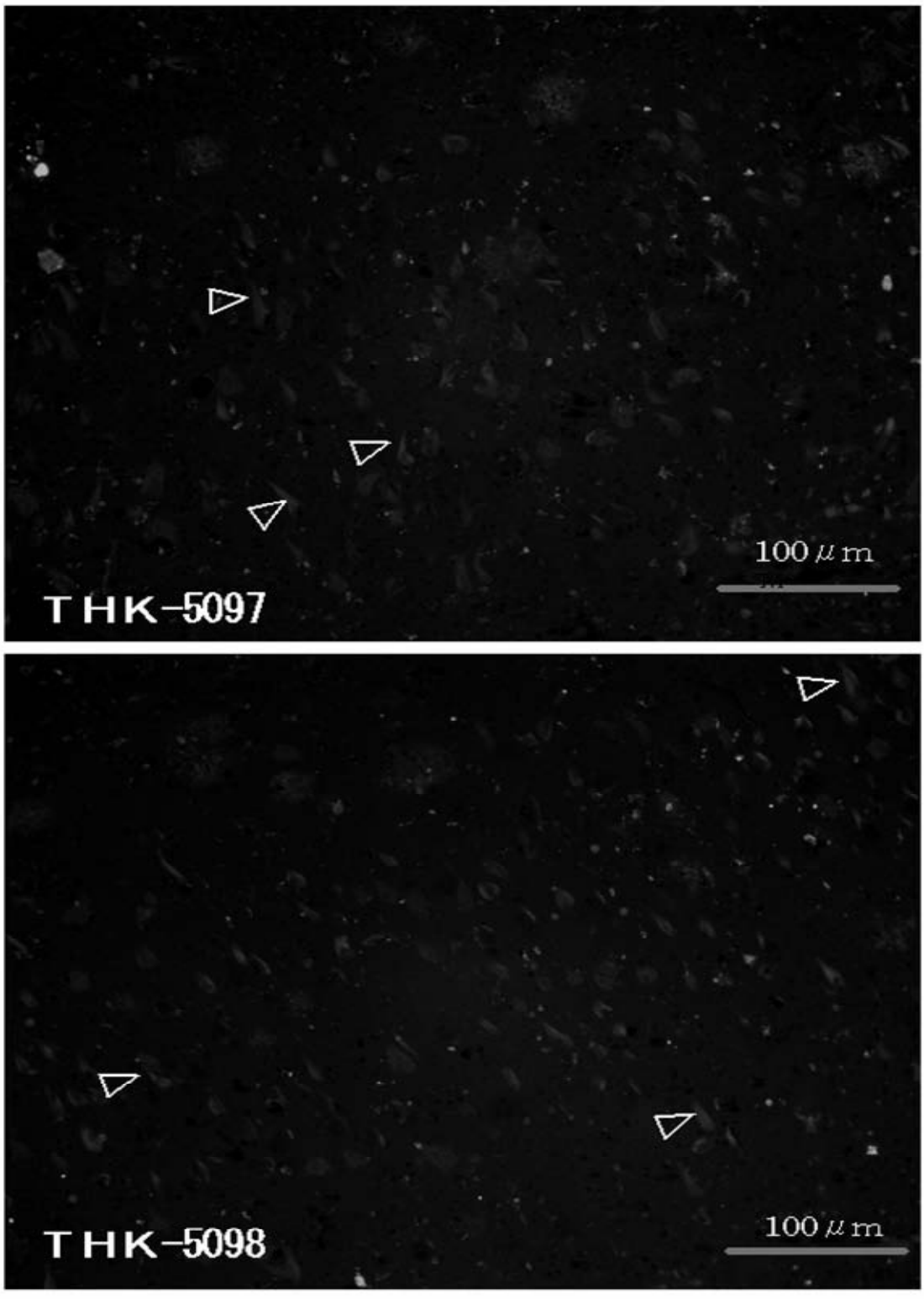


FIG. 14

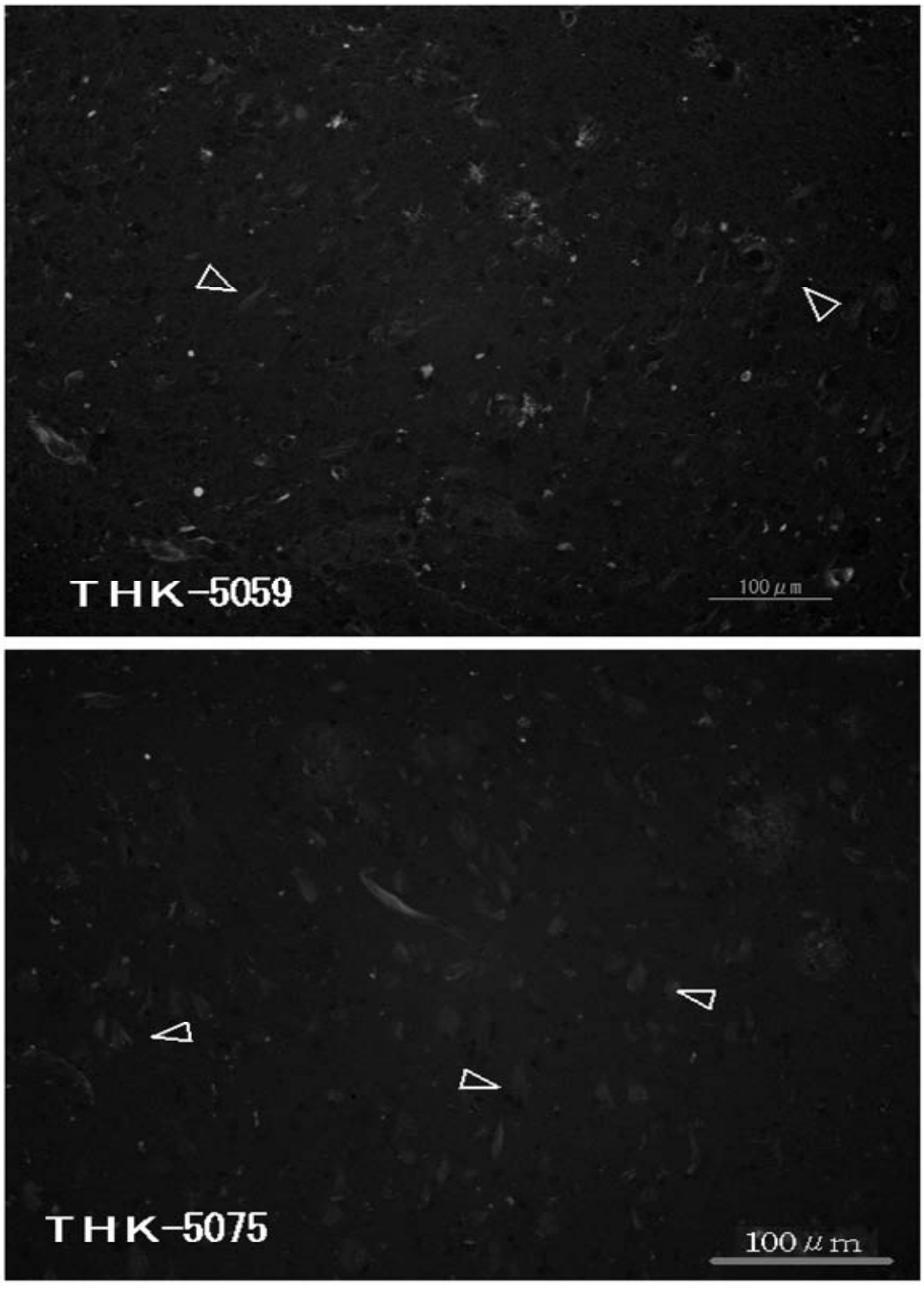


FIG. 15

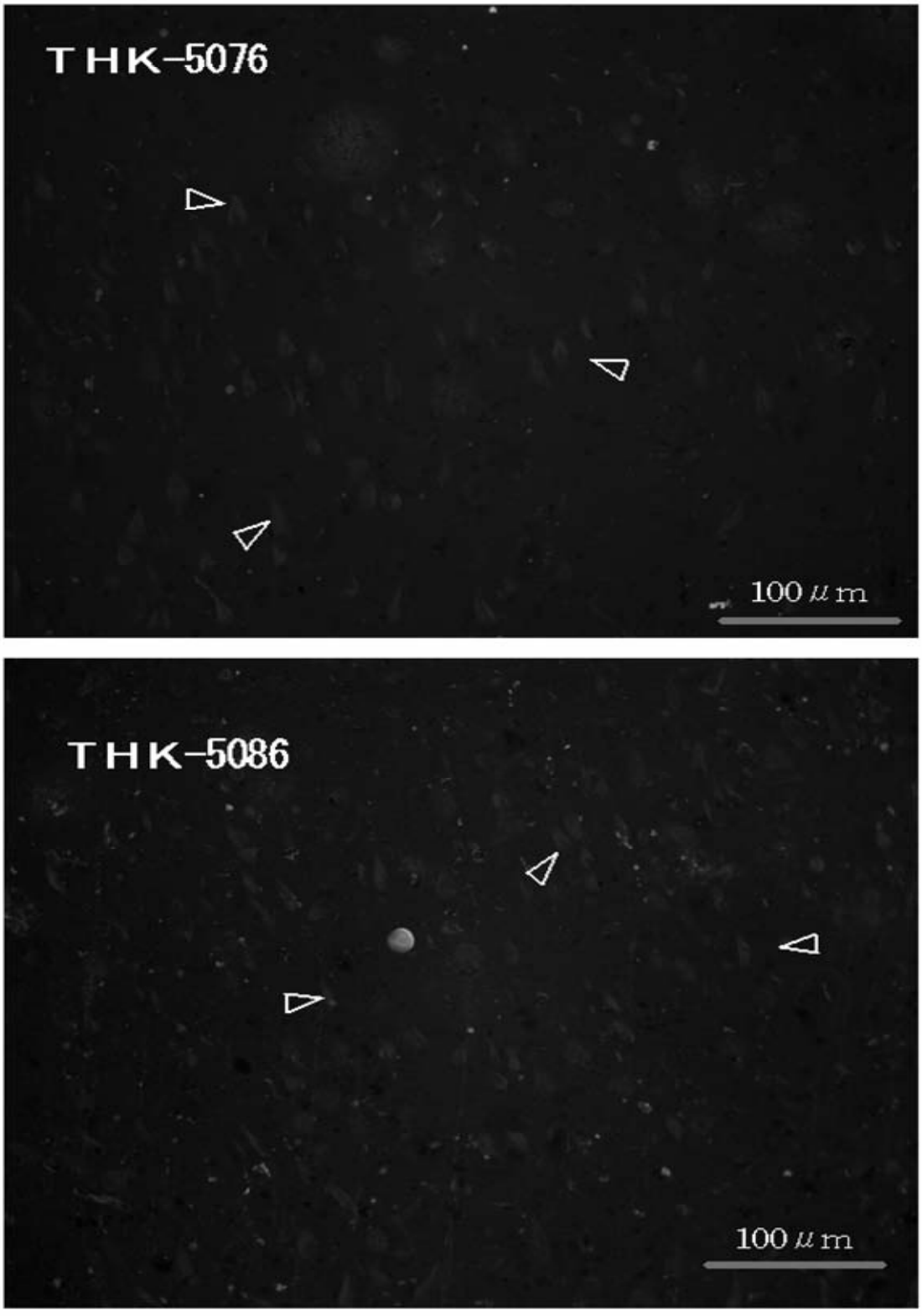


FIG. 16

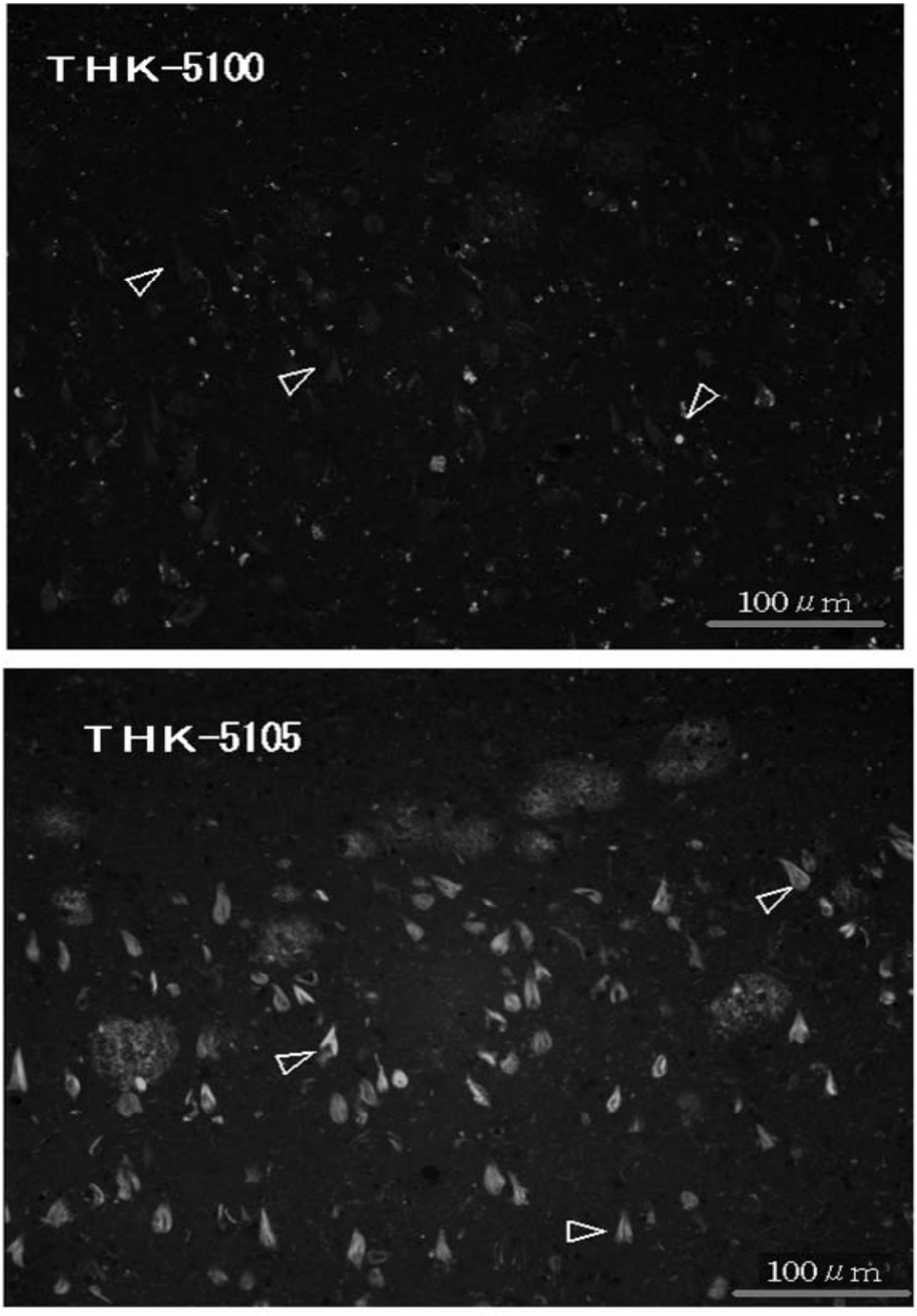


FIG. 17

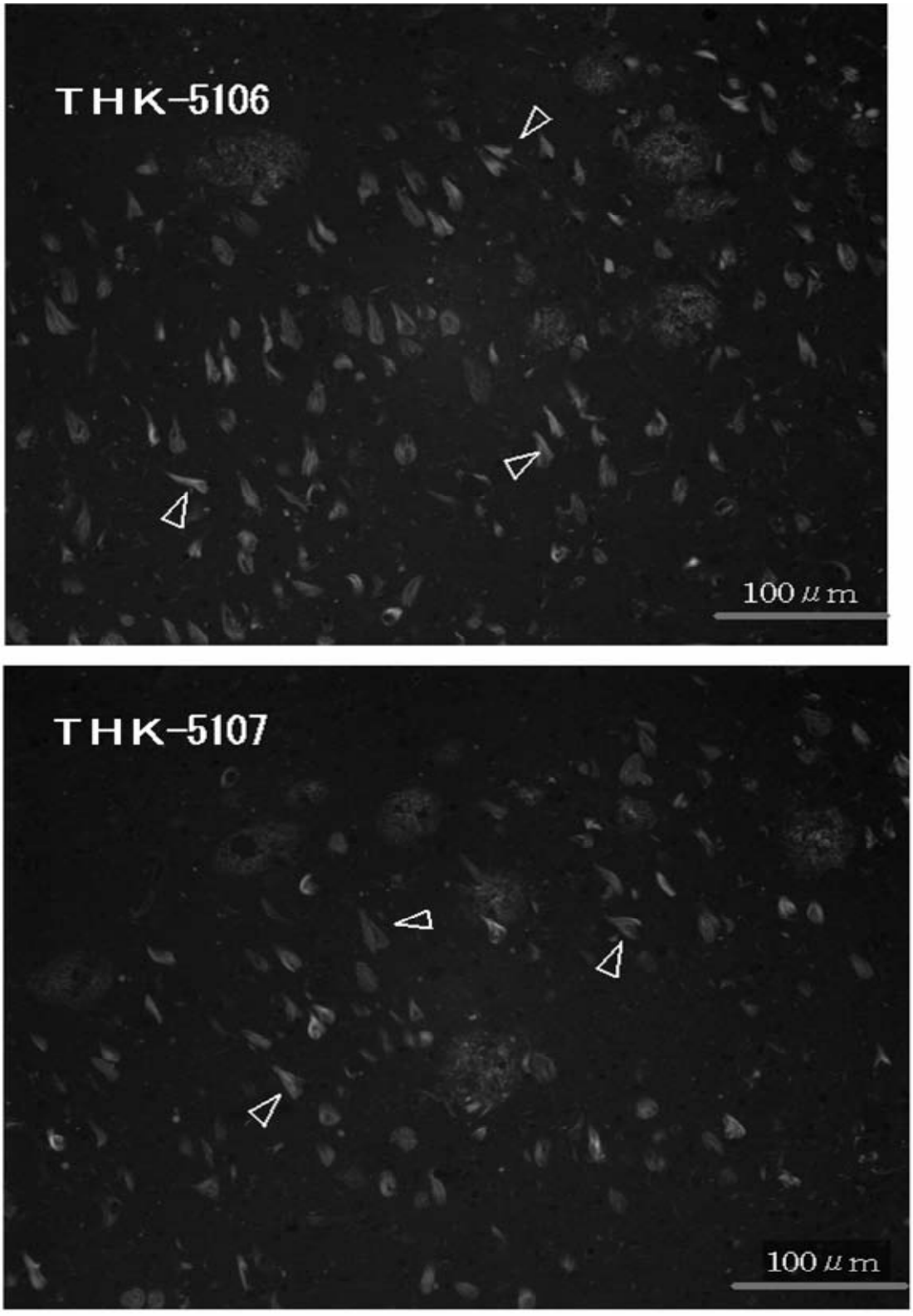


FIG. 18

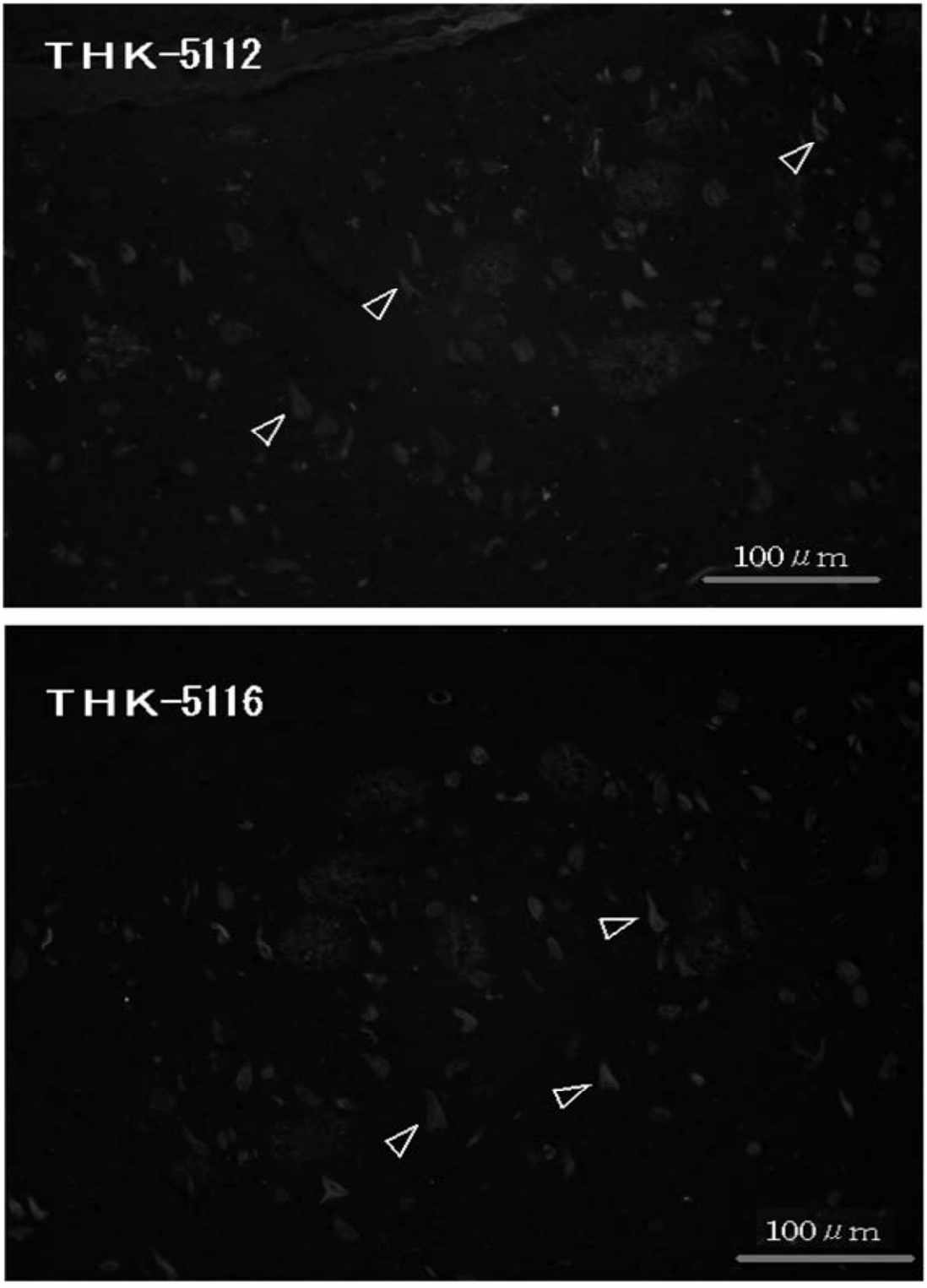


FIG. 19

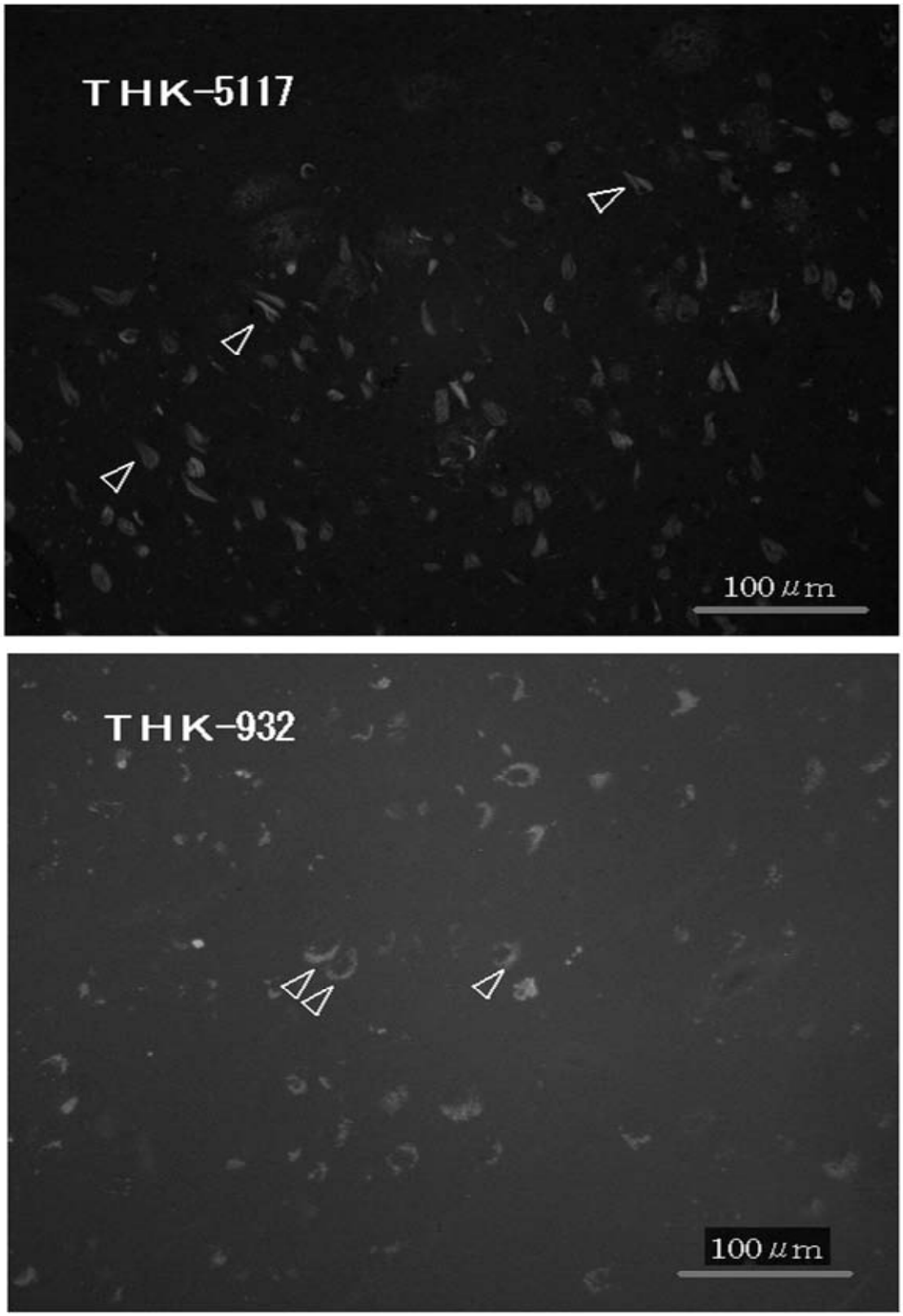


FIG. 20

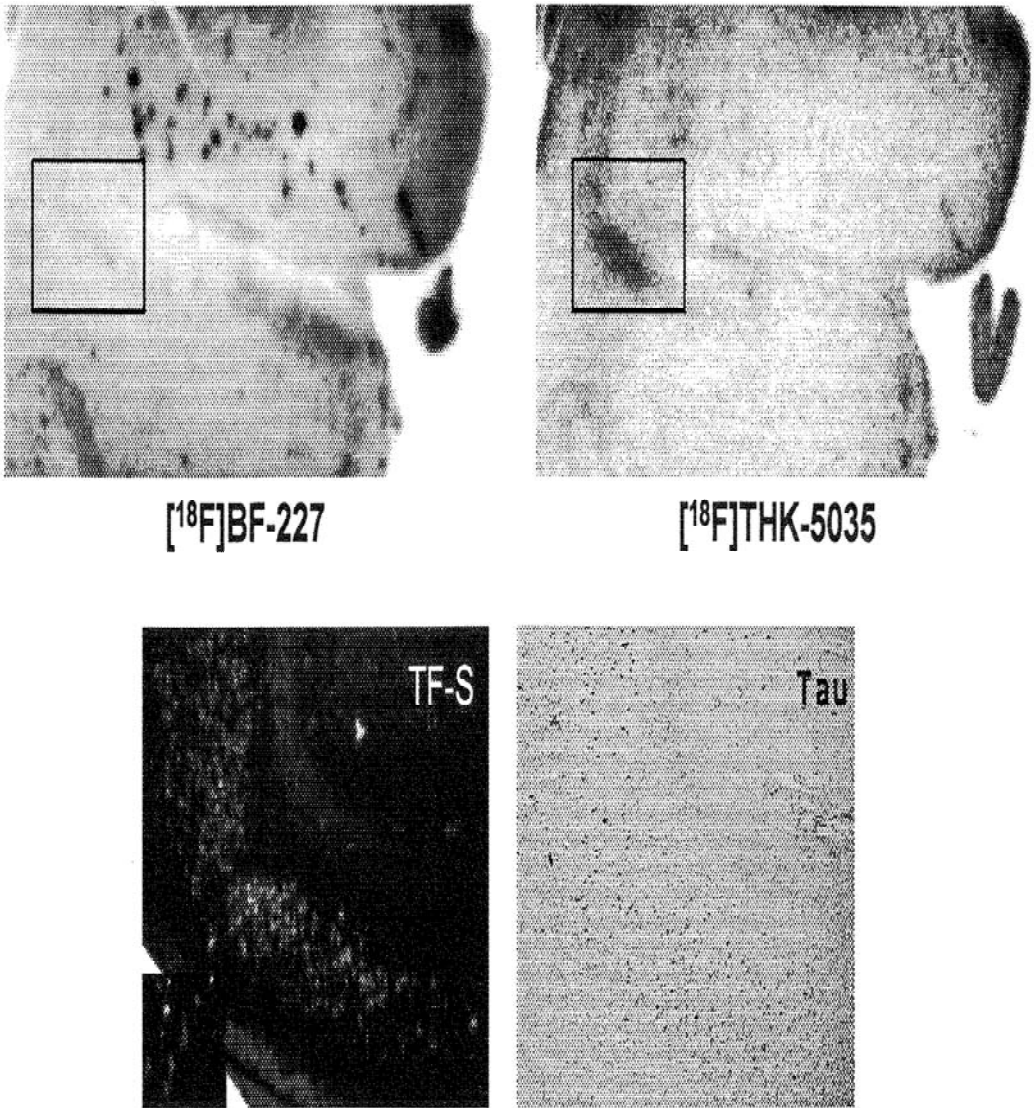


FIG. 21

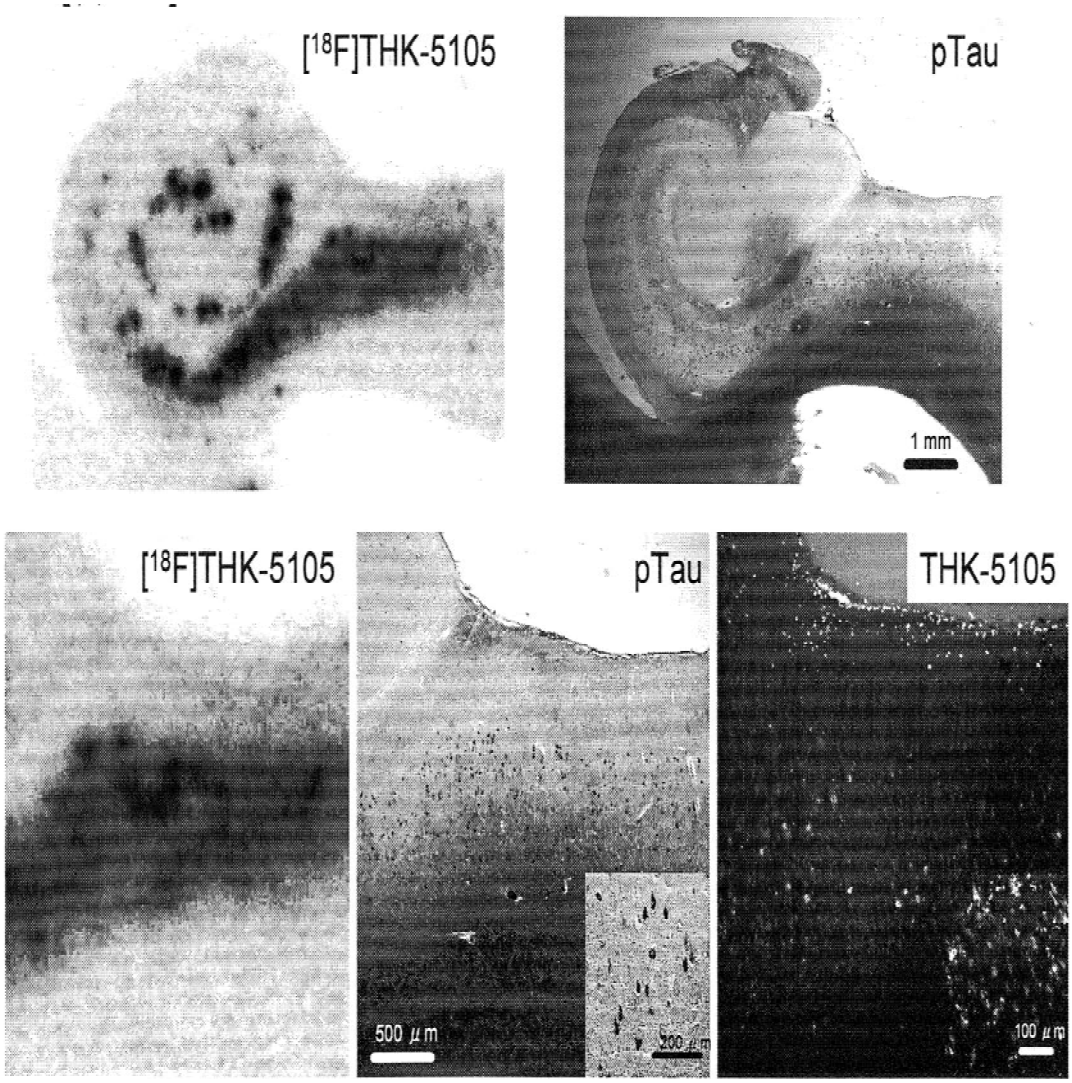

[18F]THK-5105
pTau
1 mm
[18F]THK-5105
pTau
THK-5105
500 μm
200 μm
100 μm

FIG. 22

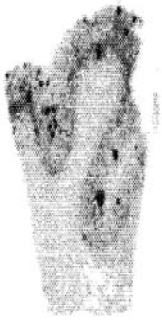
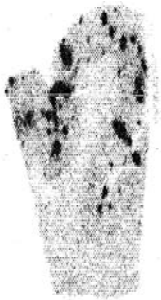
	[^{18}F]THK-5105	[^{18}F]THK-5117	[^{18}F]THK-5125
Lateral temporal			
Medial temporal			

FIG. 23

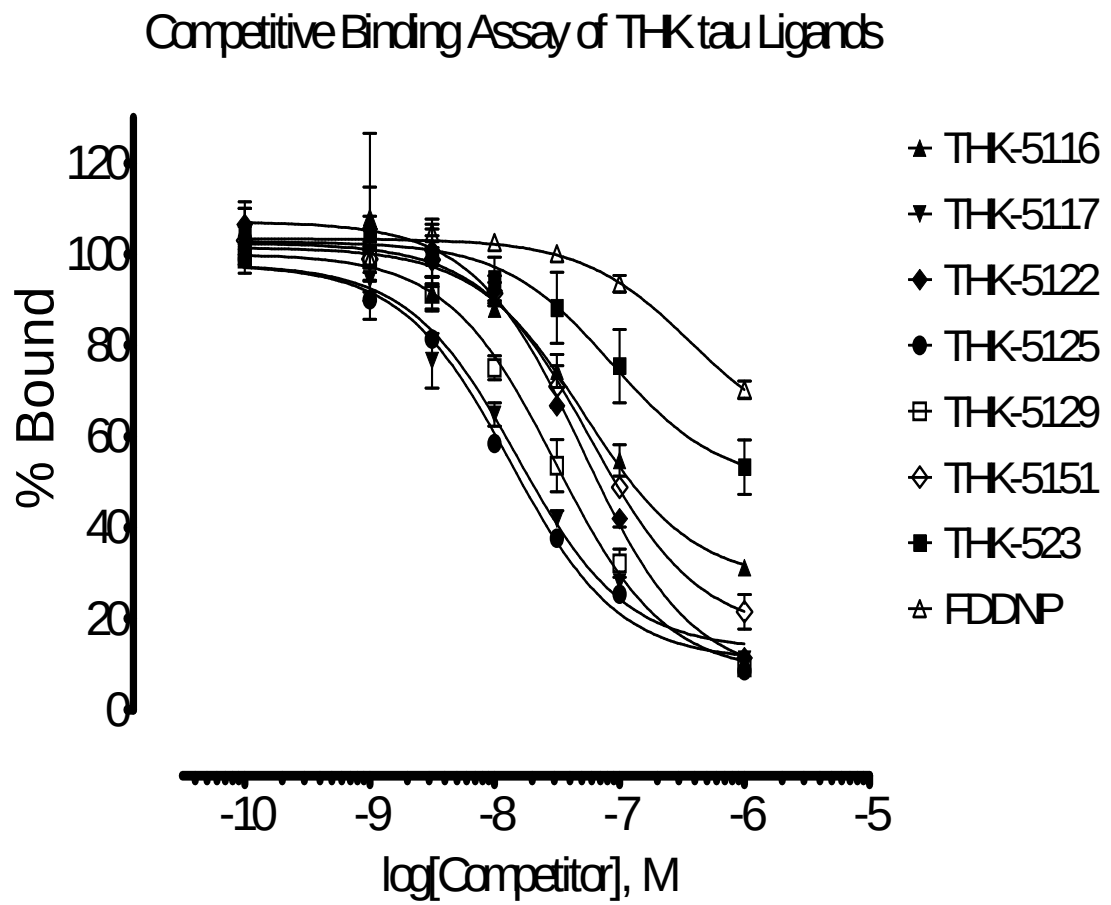

Competitive Binding Assay of THK tau Ligands
% Bound
120
100
80
60
40
20
0
-10
-9
-8
-7
-6
-5
log[Competitor], M
THK-5116
THK-5117
THK-5122
THK-5125
THK-5129
THK-5151
THK-523
FDDNP

FIG. 24

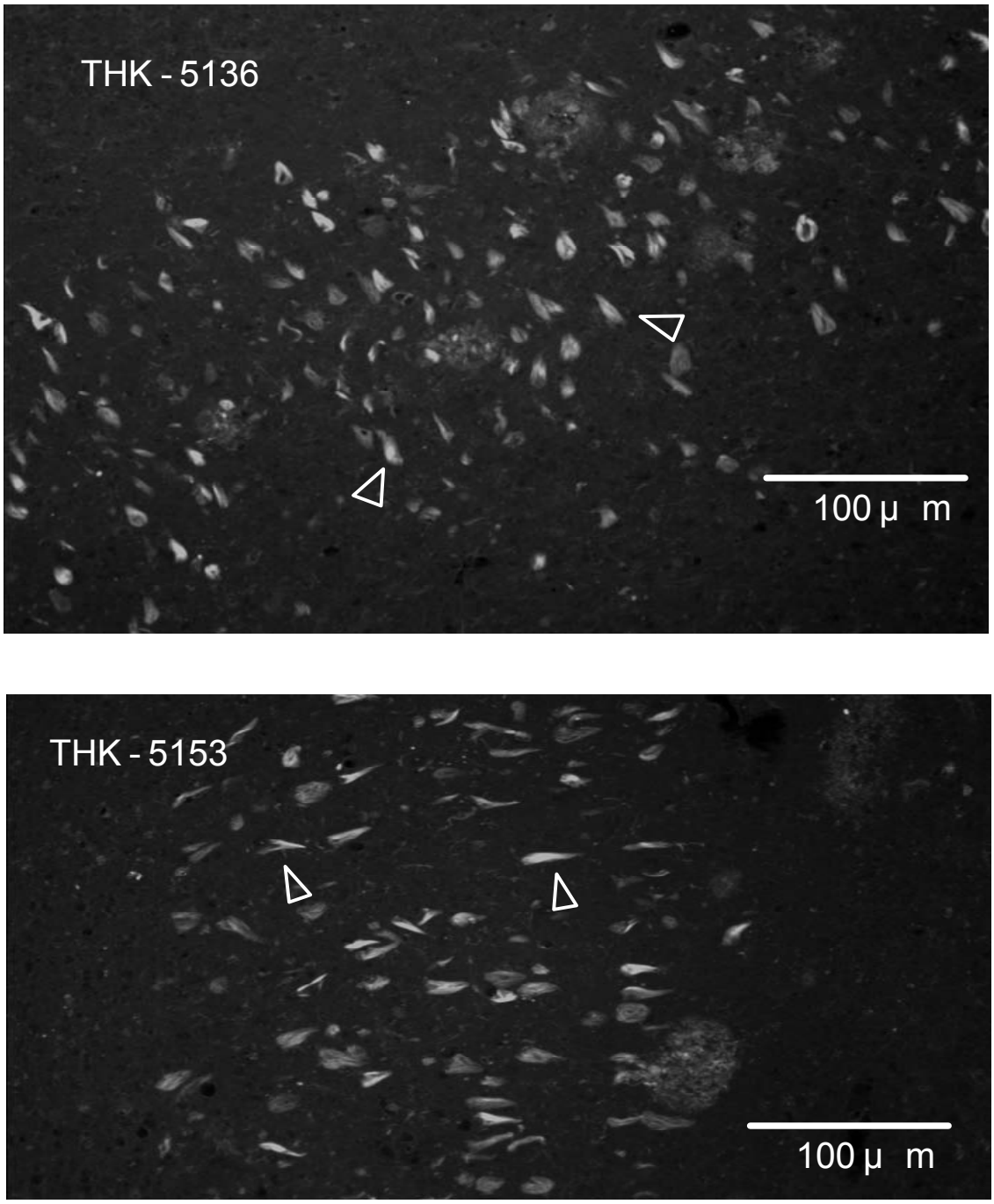


FIG. 25

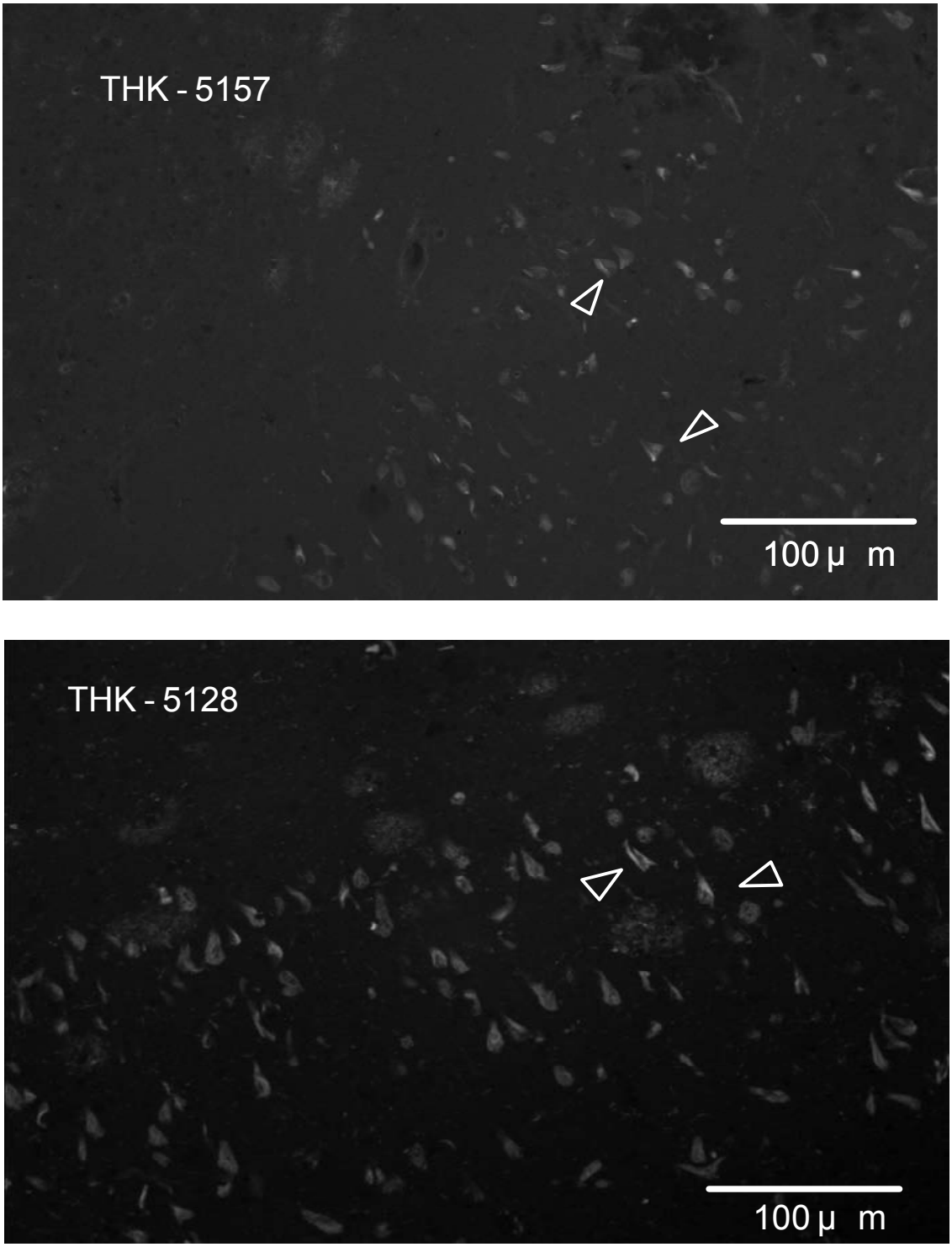


FIG. 26

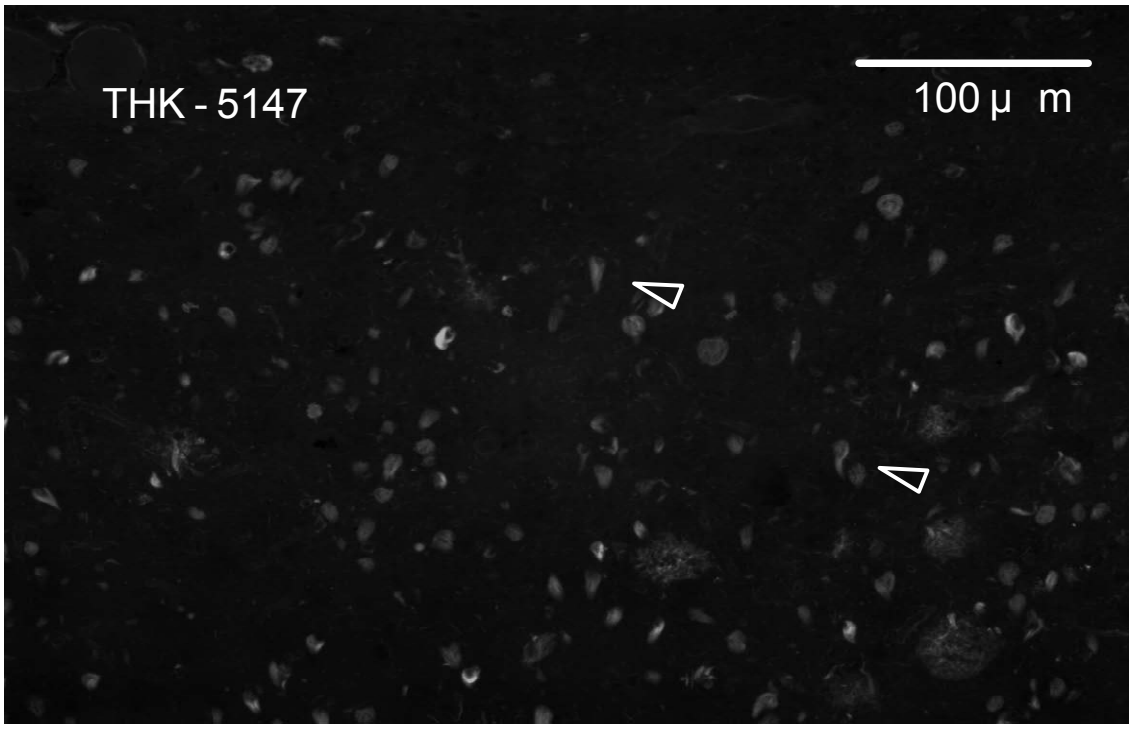


FIG. 27

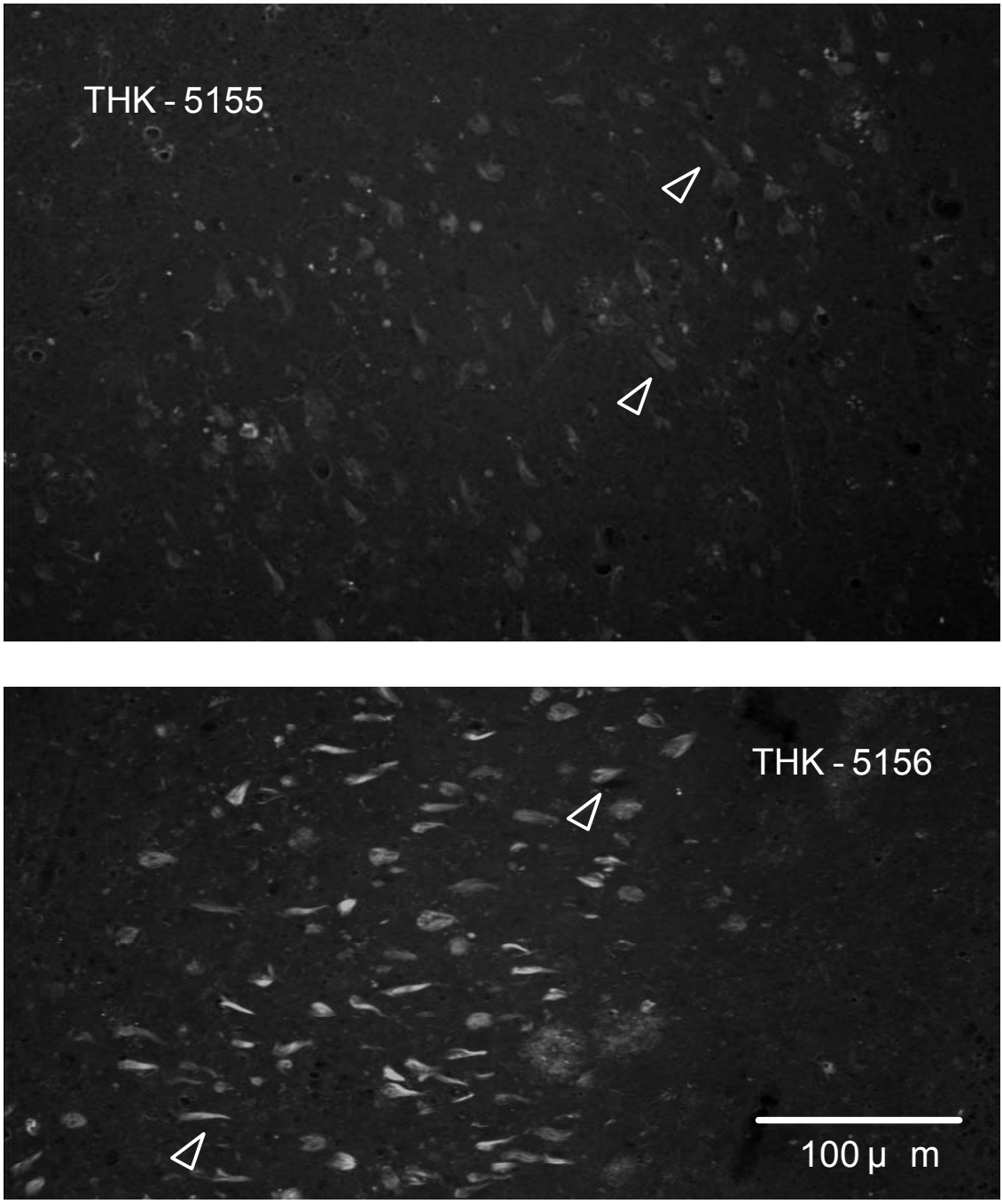


FIG. 28

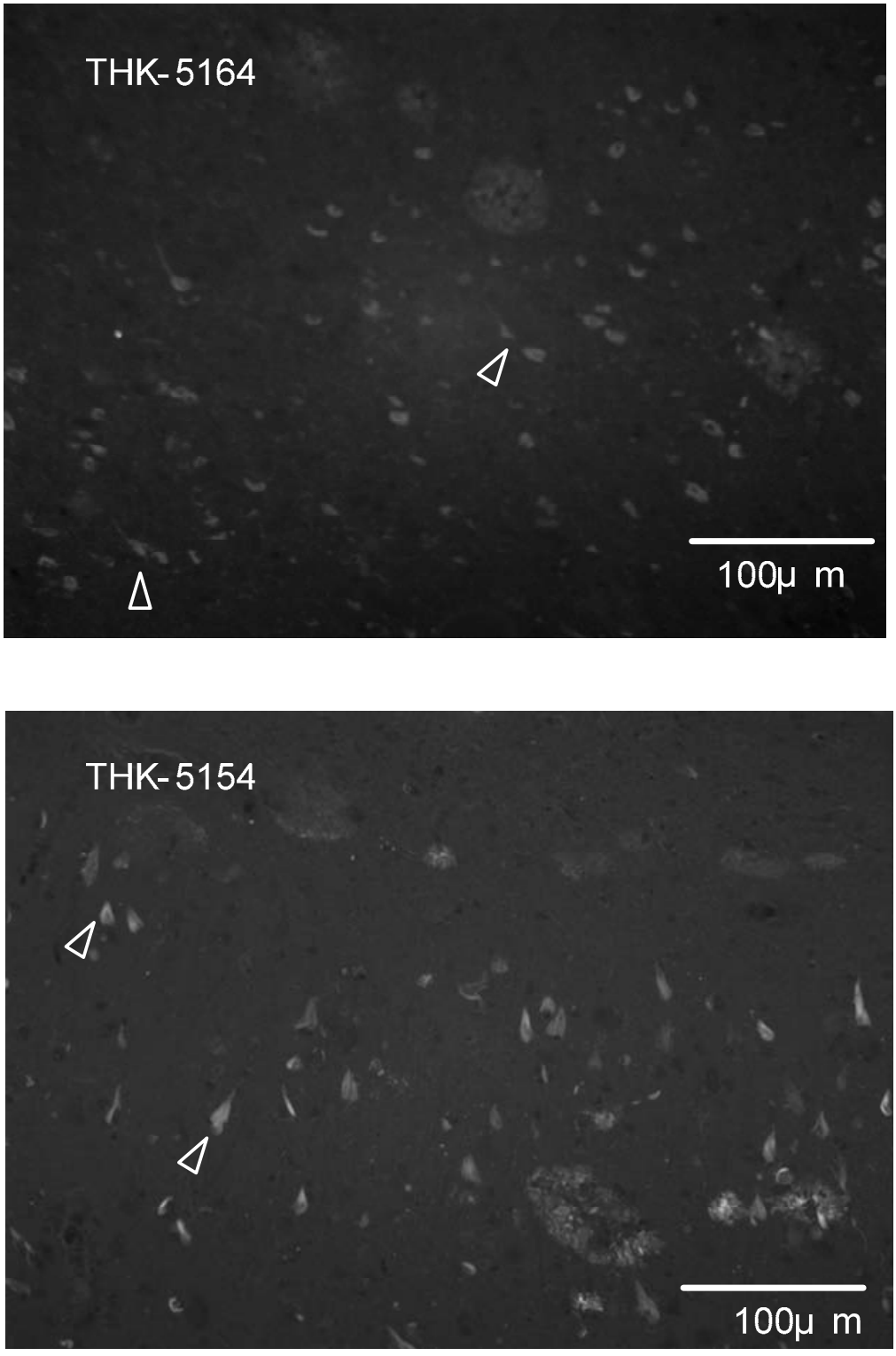


FIG. 29

Fig.1

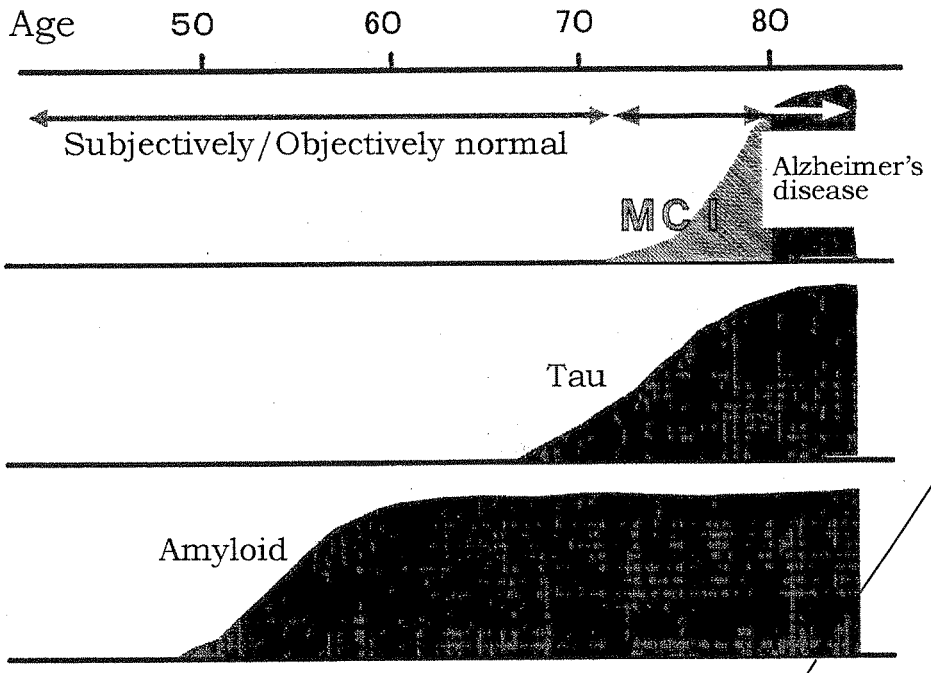
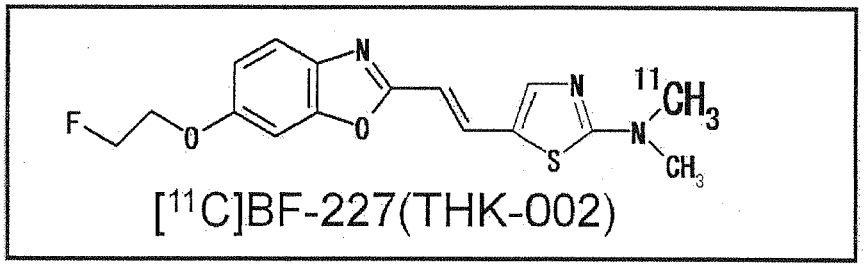
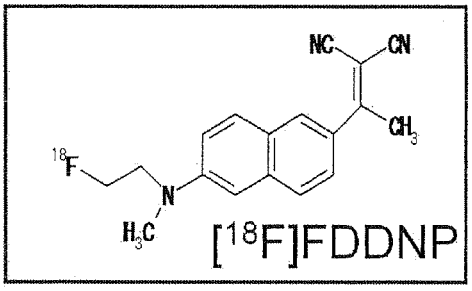
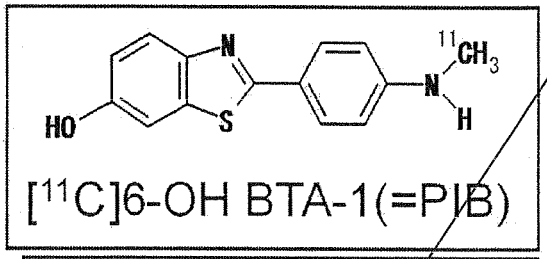
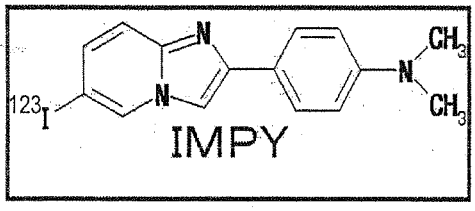

Age
50
60
70
80
Subjectively/Objectively normal
MCI
Alzheimer's disease
Tau
Amyloid

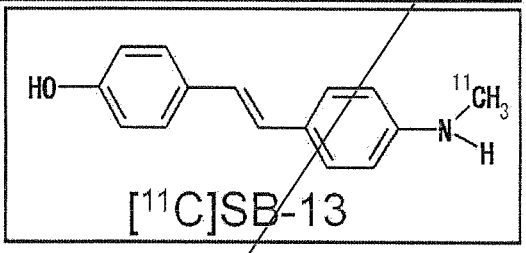
Fig.2

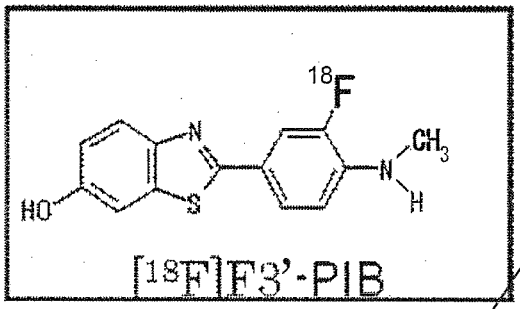

[11C]BF-227(THK-002)

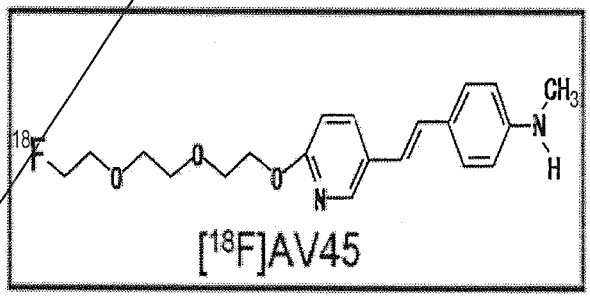

[18F]FDDNP


[11C]6-OH BTA-1(=PIB)


IMPY


[11C]SB-13


[18F]F3'-PIB


[18F]AV45

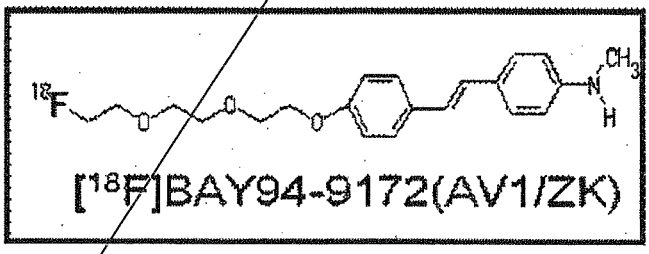

[18F]BAY94-9172(AV1/ZK)

Fig.3

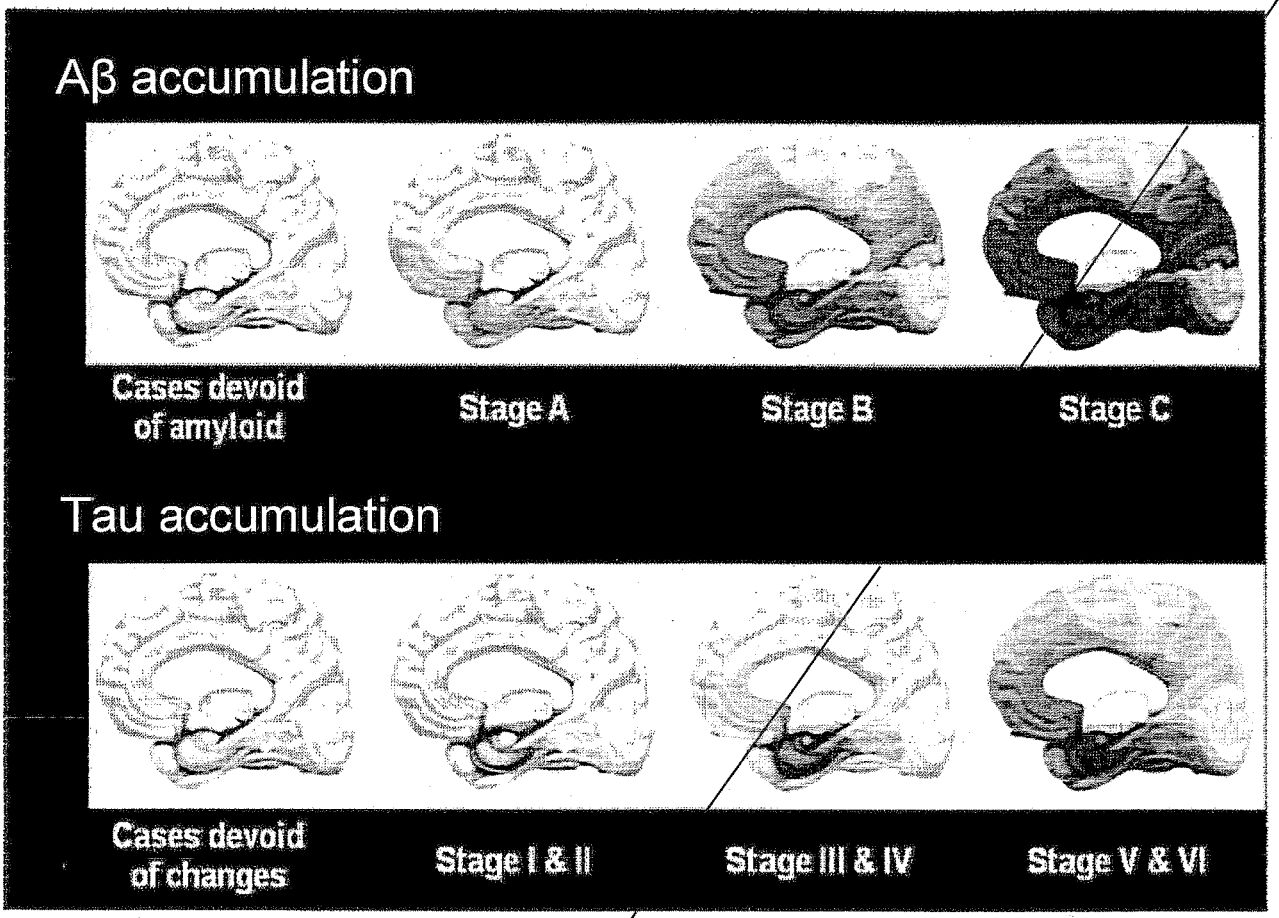

Aβ accumulation
Cases devoid of amyloid
Stage A
Stage B
Stage C
Tau accumulation
Cases devoid of changes
Stage I & II
Stage III & IV
Stage V & VI

Fig.4

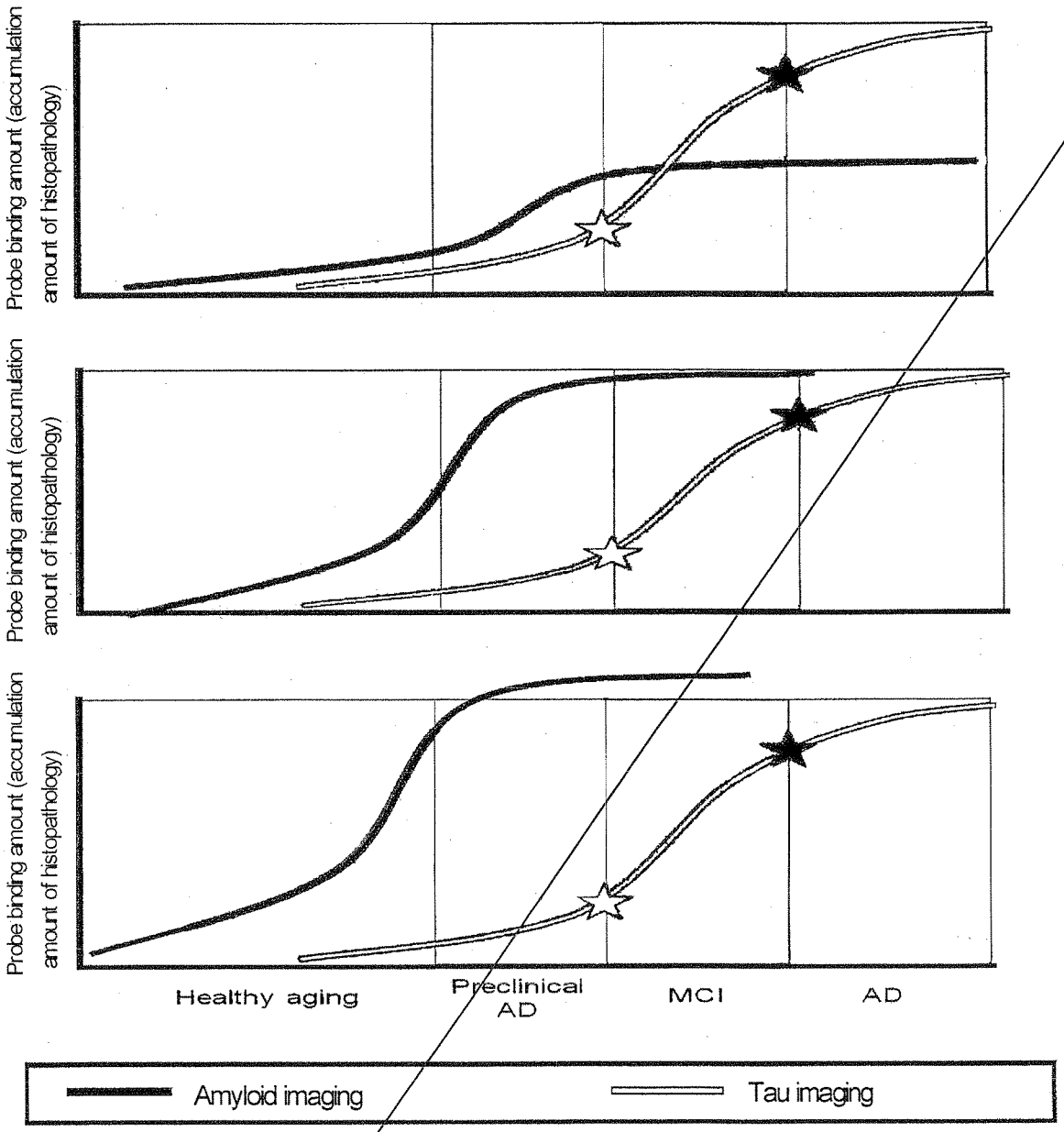

Probe binding amount (accumulation amount of histopathology)
Probe binding amount (accumulation amount of histopathology)
Probe binding amount (accumulation amount of histopathology)
Healthy aging
Preclinical AD
MCI
AD
Amyloid imaging
Tau imaging

Fig.5

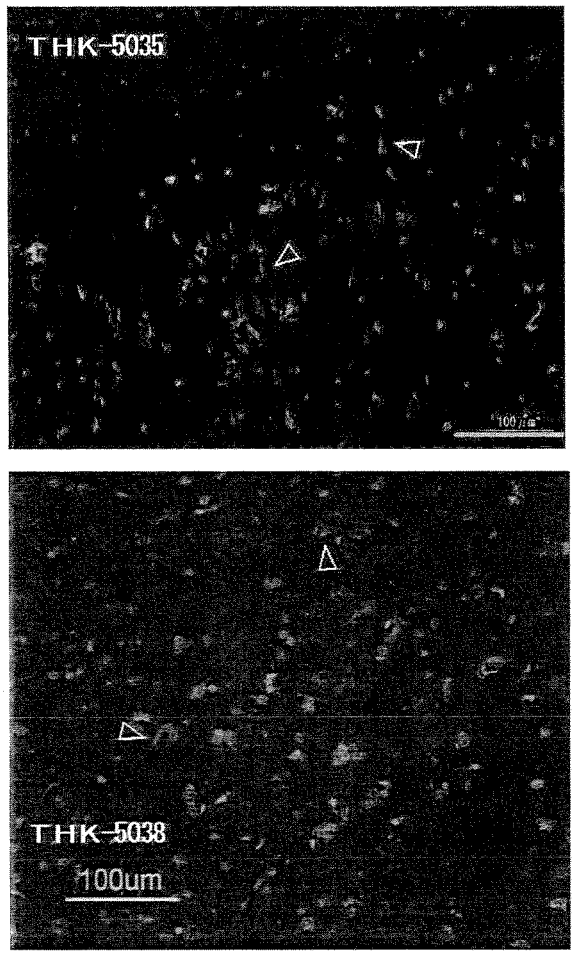


Fig.6

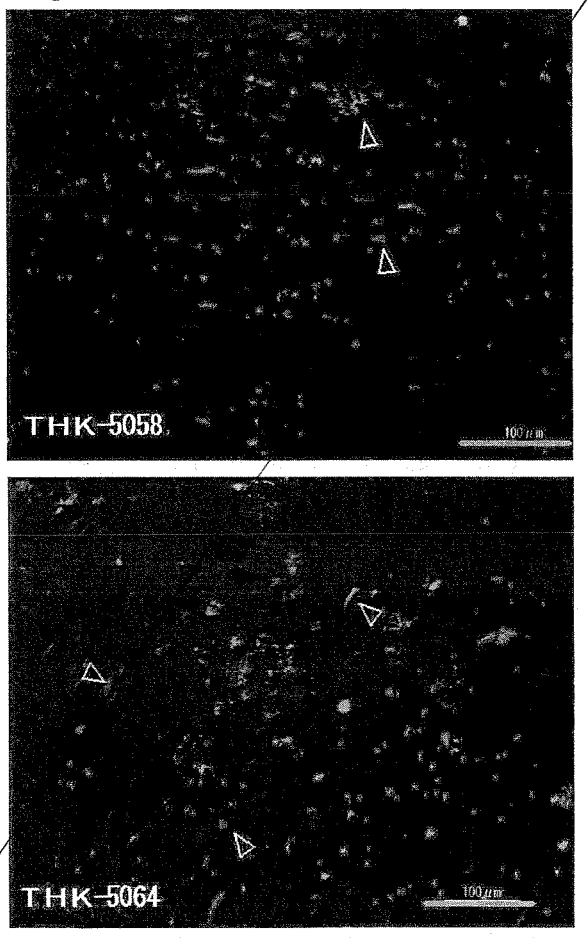


Fig.7

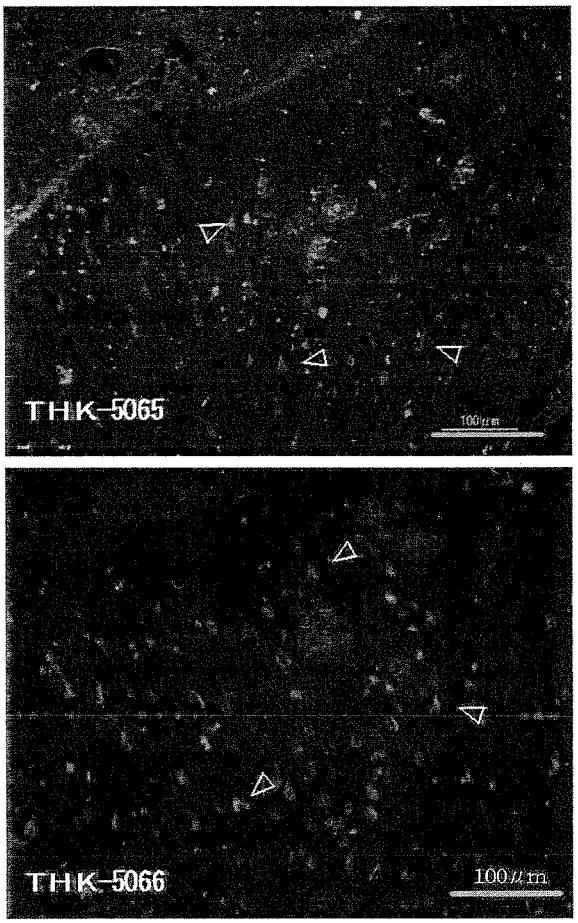


Fig.8

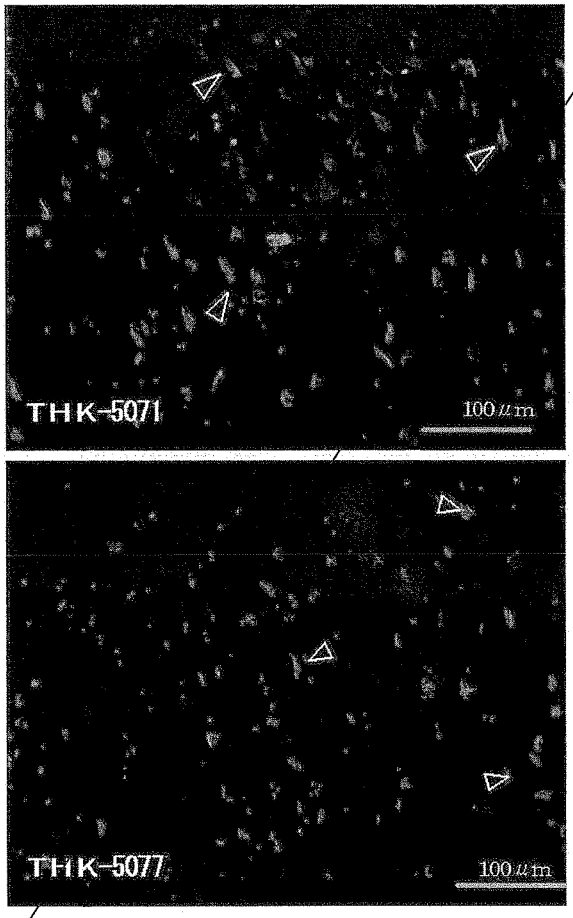


Fig.9

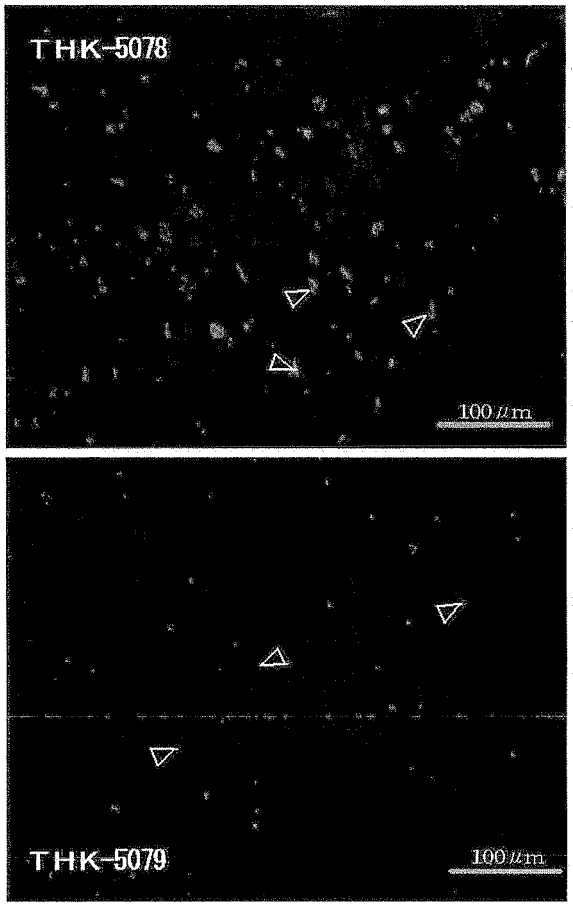


Fig.10

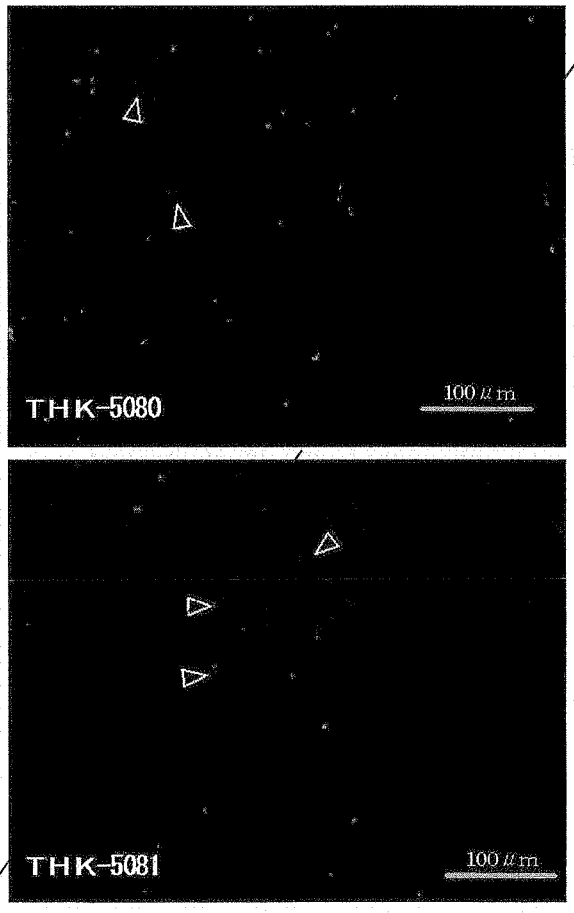


Fig.11

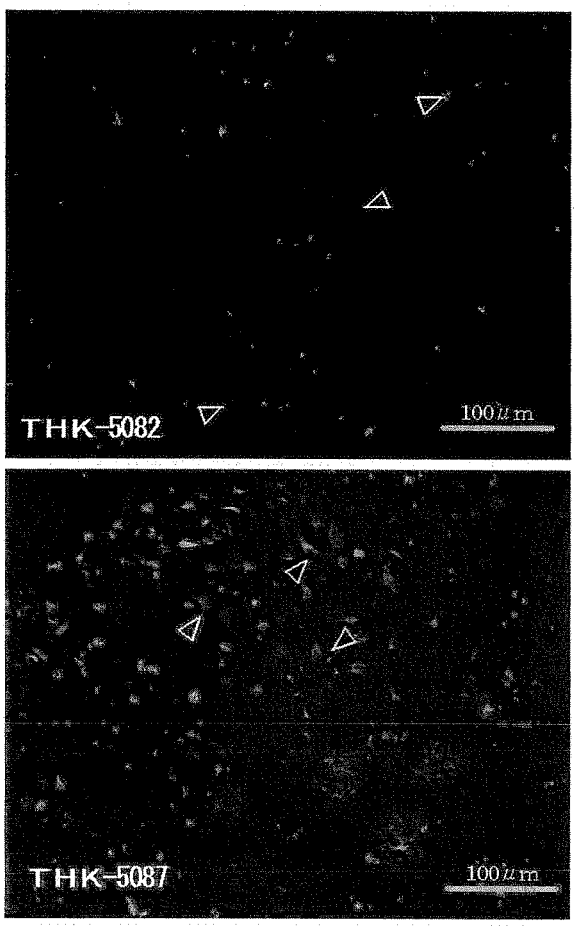


Fig.12

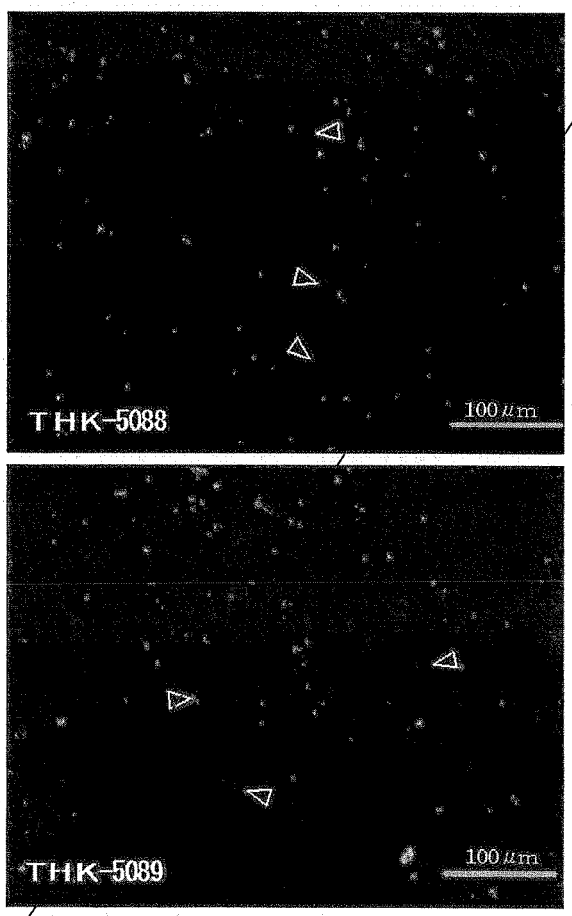


Fig.13

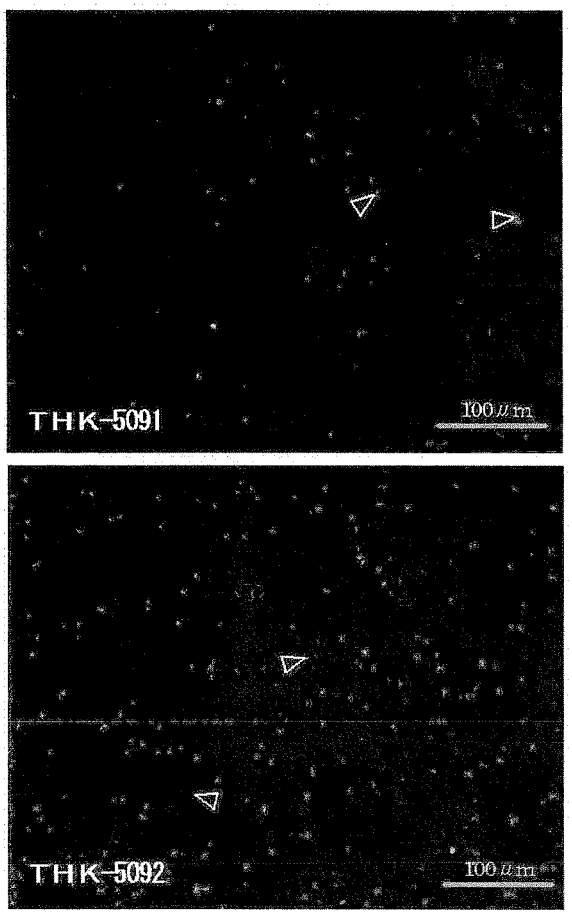


Fig.14

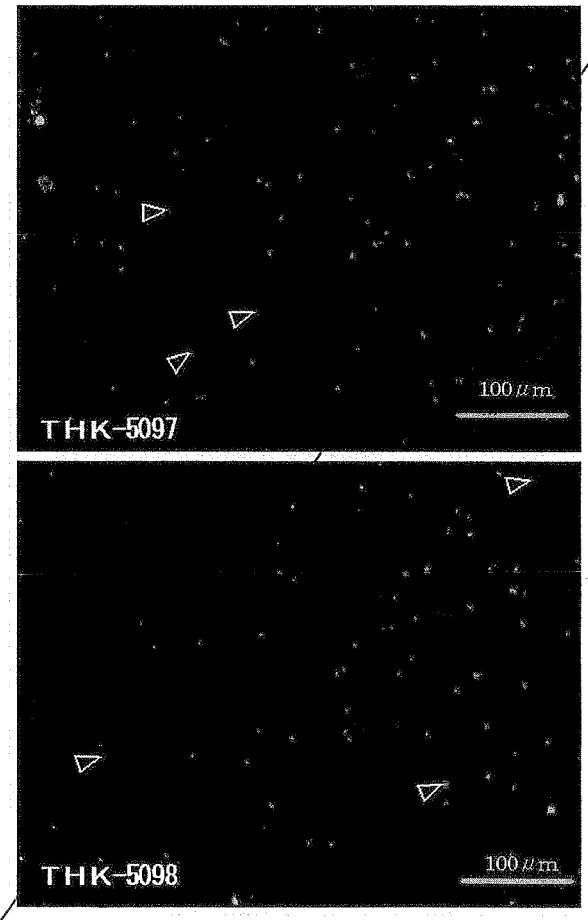


Fig.15

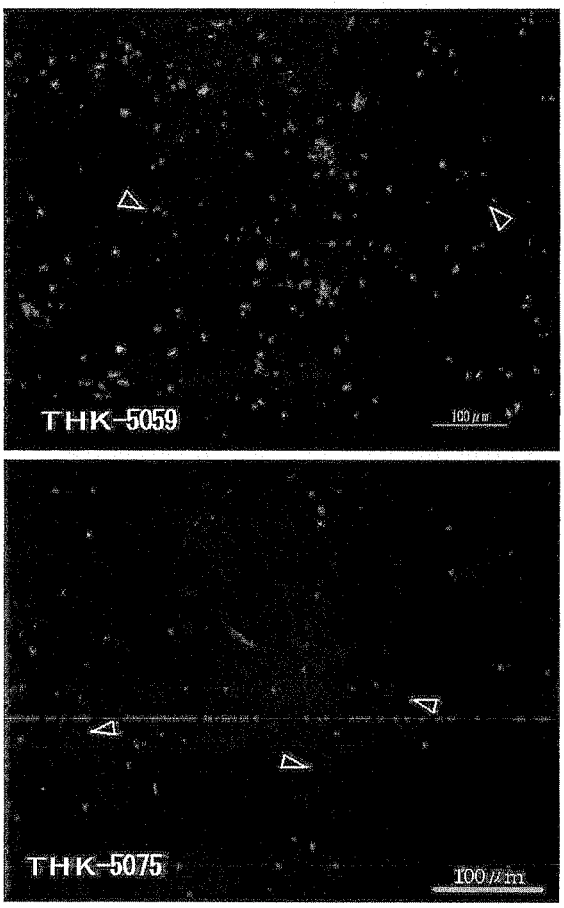


Fig.16

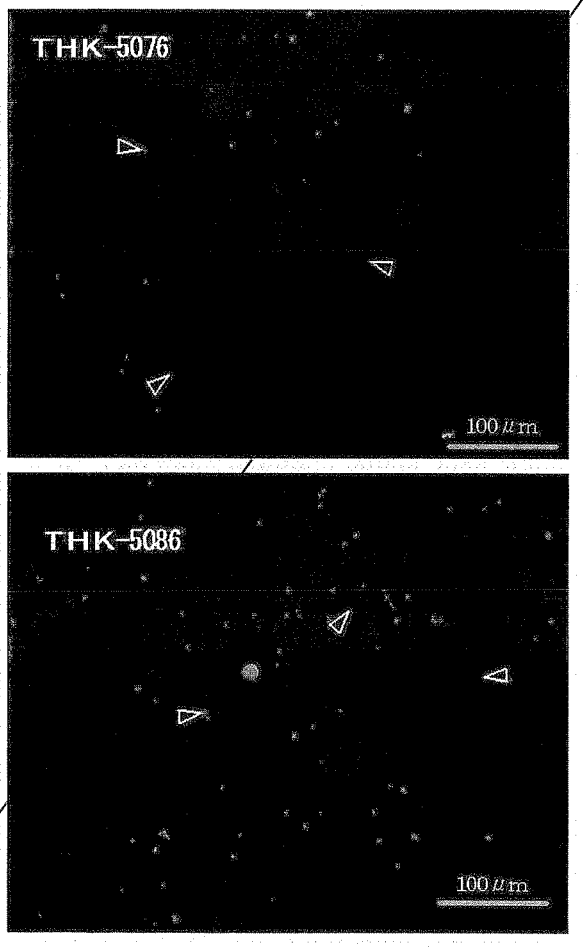
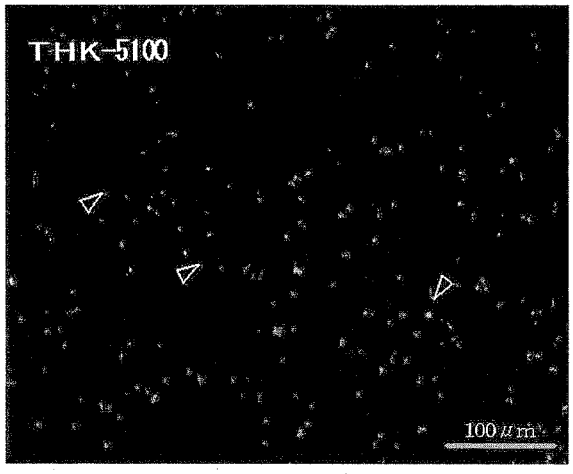


Fig.17



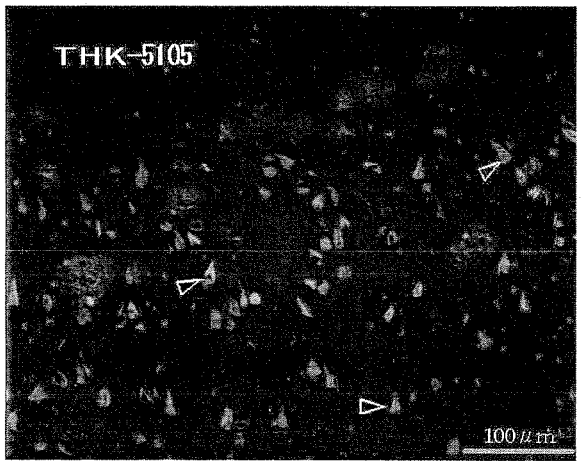
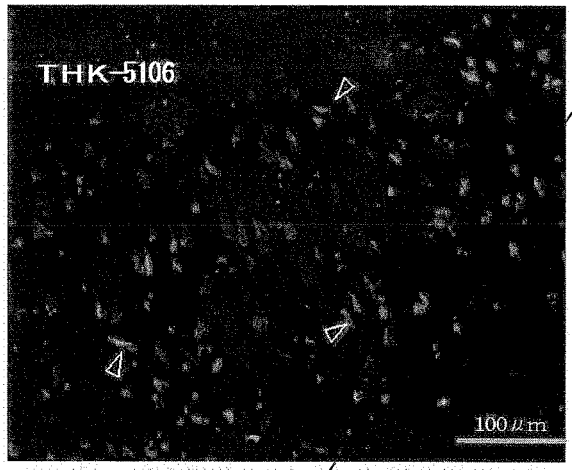


Fig.18



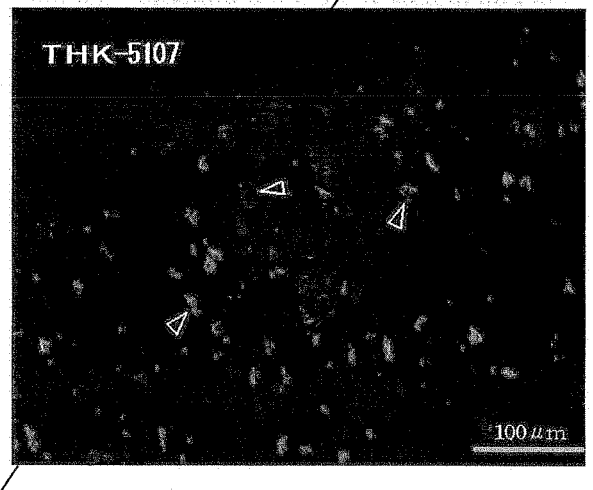
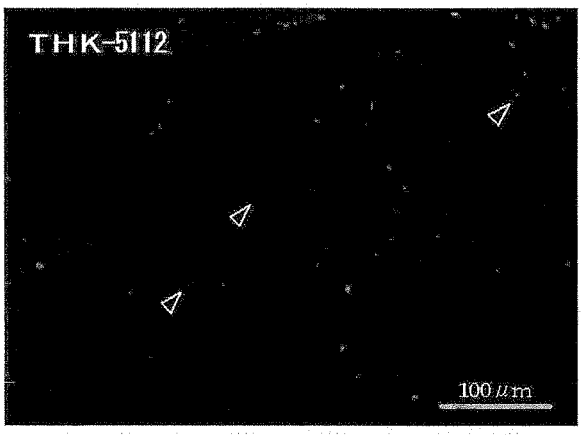


Fig.19



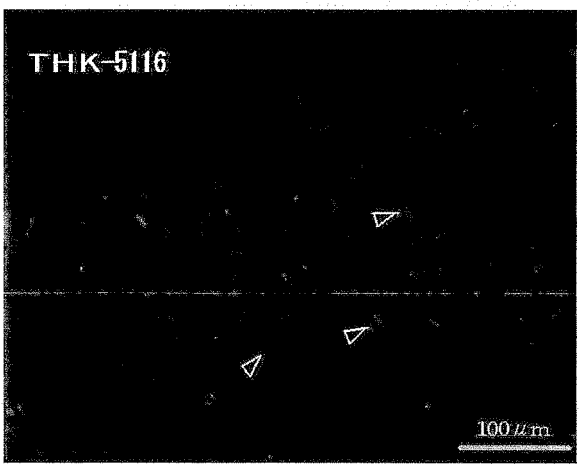
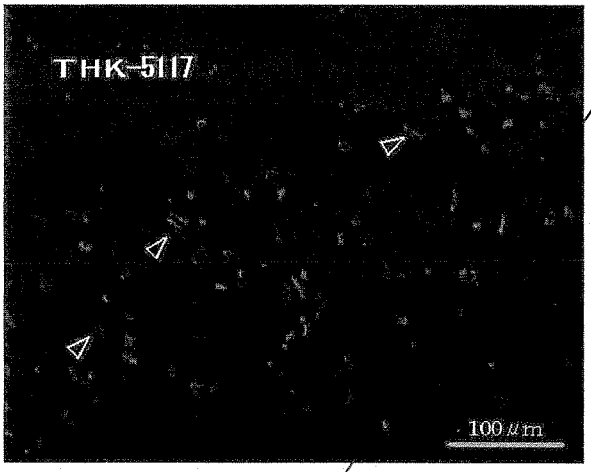


Fig.20



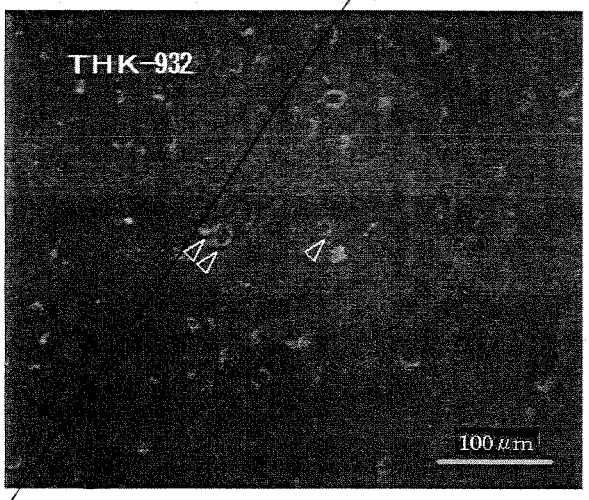


Fig.21

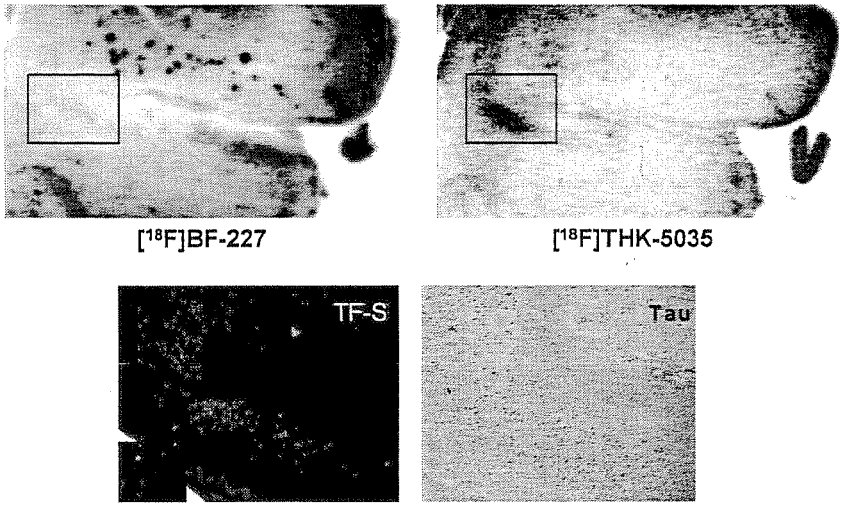

[18F]BF-227
[18F]THK-5035
TF-S
Tau

Fig.22

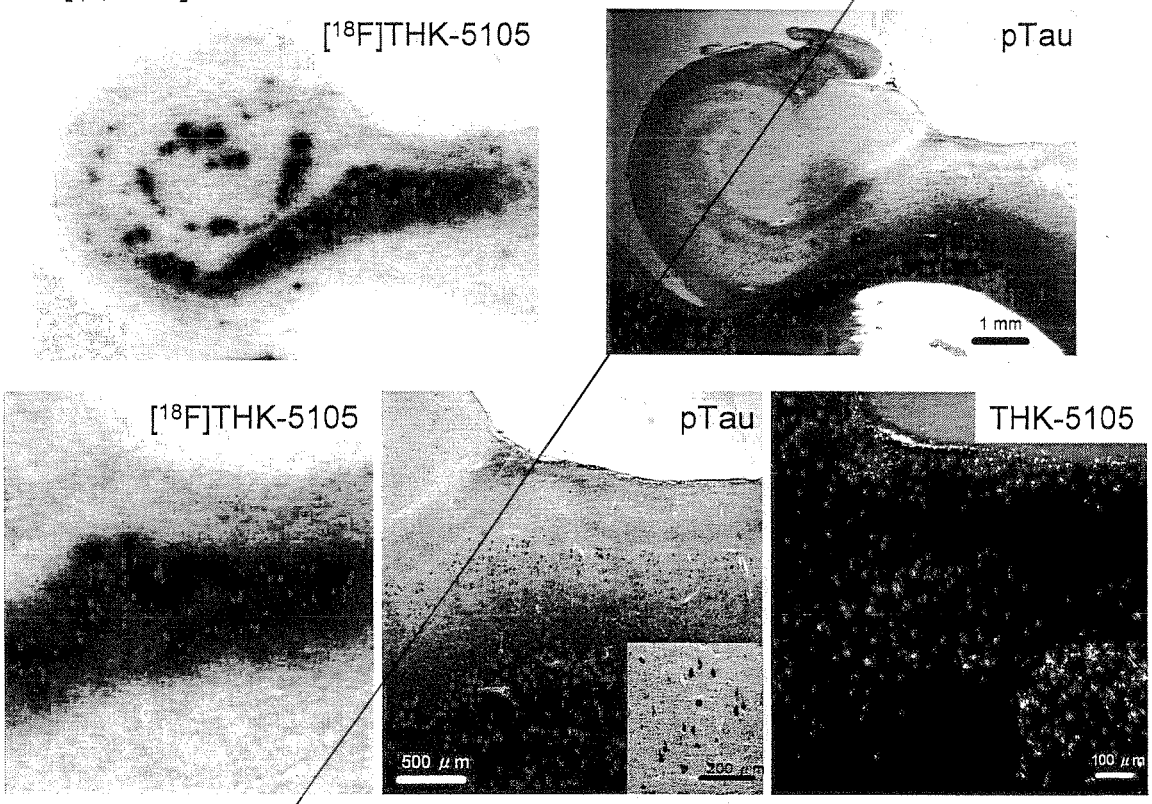

[18F]THK-5105
pTau
1 mm
[18F]THK-5105
pTau
THK-5105
500 μm
100 μm

Fig.23

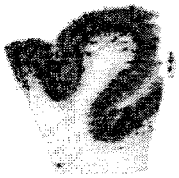
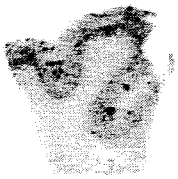
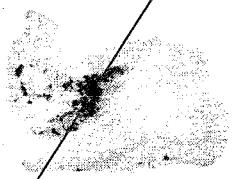
	[18F]THK-5105	[18F]THK-5117	[18F]THK-5125
Lateral temporal			
Medial temporal			

Fig.24

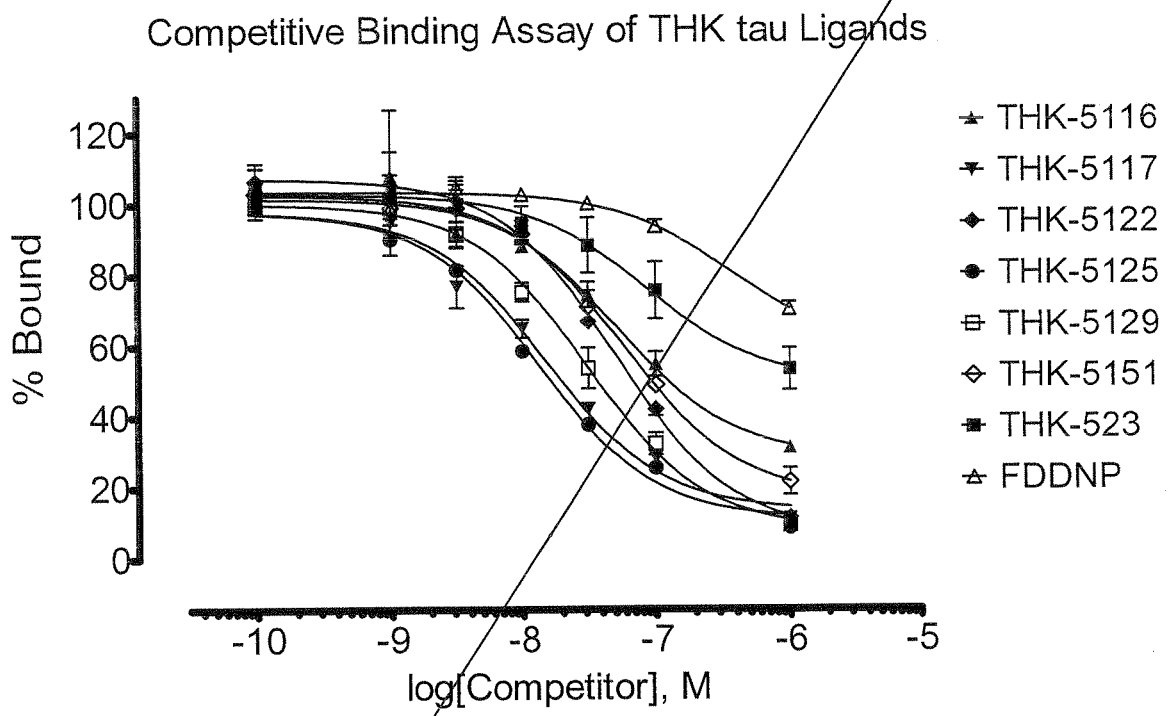
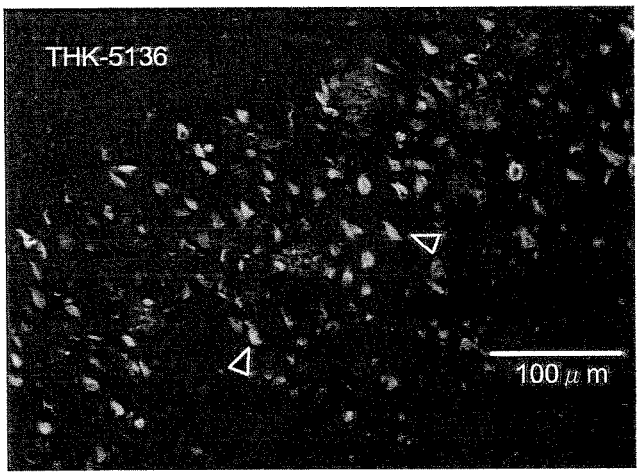


Fig.25



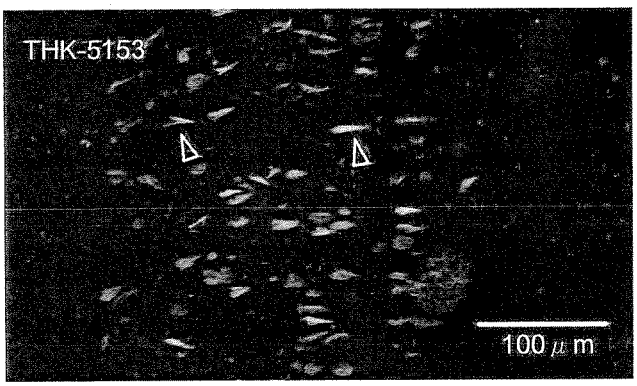
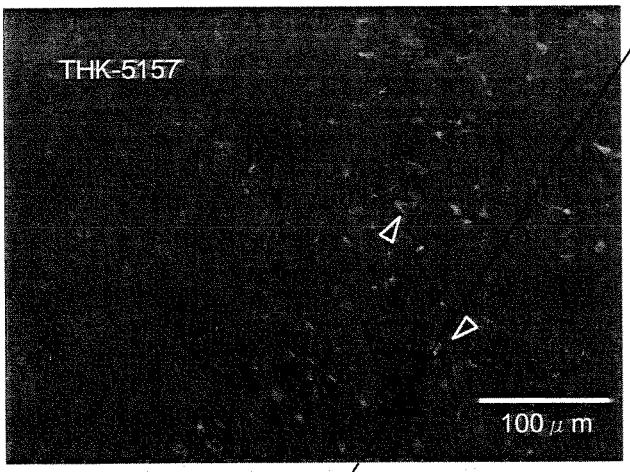


Fig.26



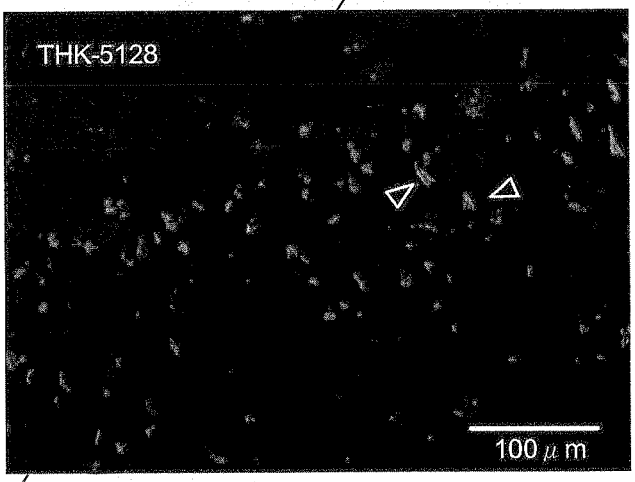


Fig.27

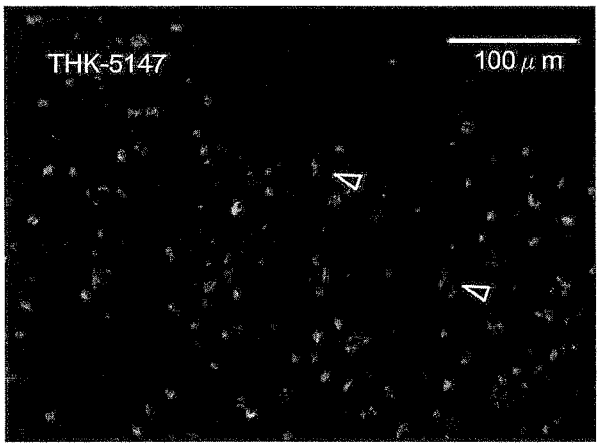
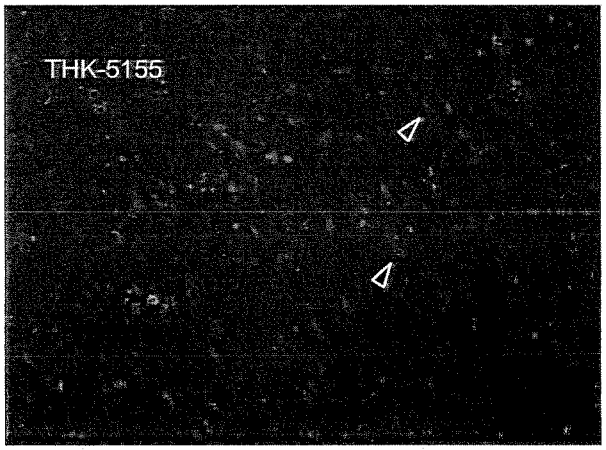


Fig.28



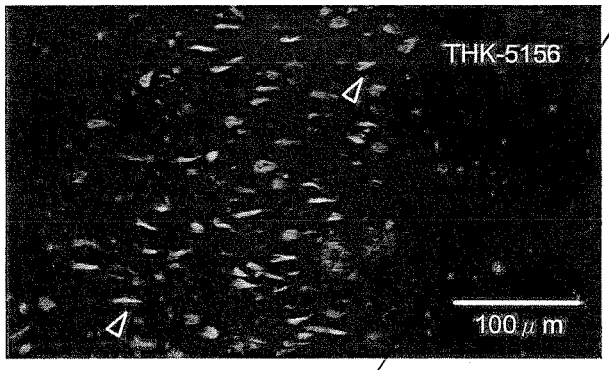


Fig.29

