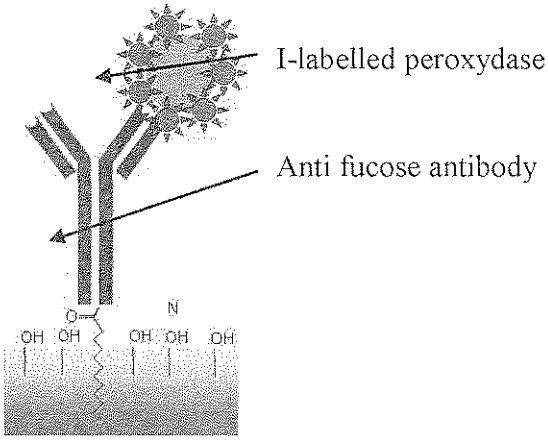


Fig. 1

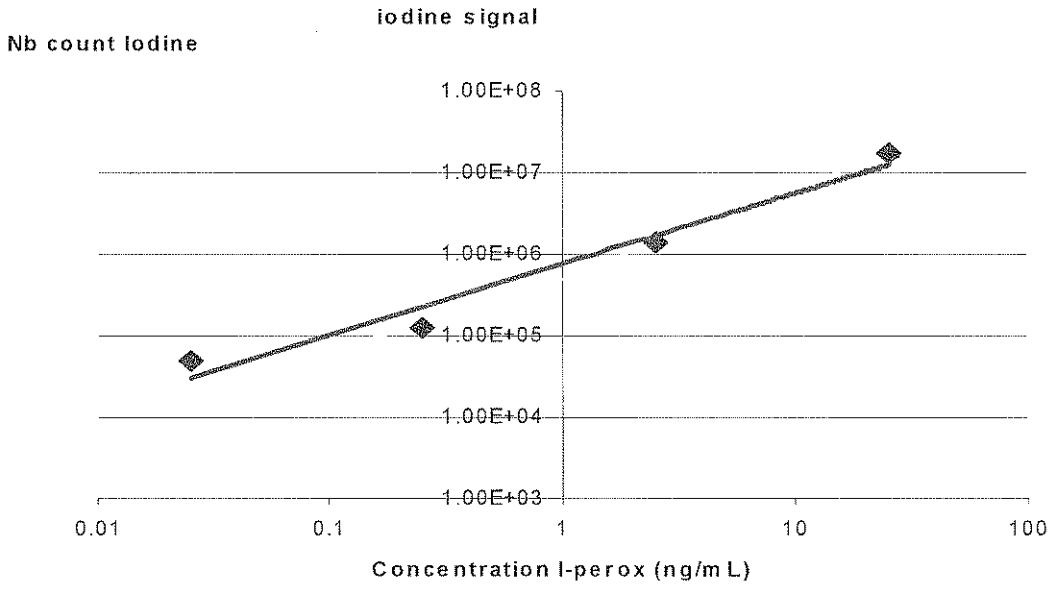

iodine signal
Nb count Iodine
1.00E+08
1.00E+07
1.00E+06
1.00E+05
1.00E+04
1.00E+03
0.01
0.1
1
10
100
Concentration I-perox (ng/mL)

Fig. 2

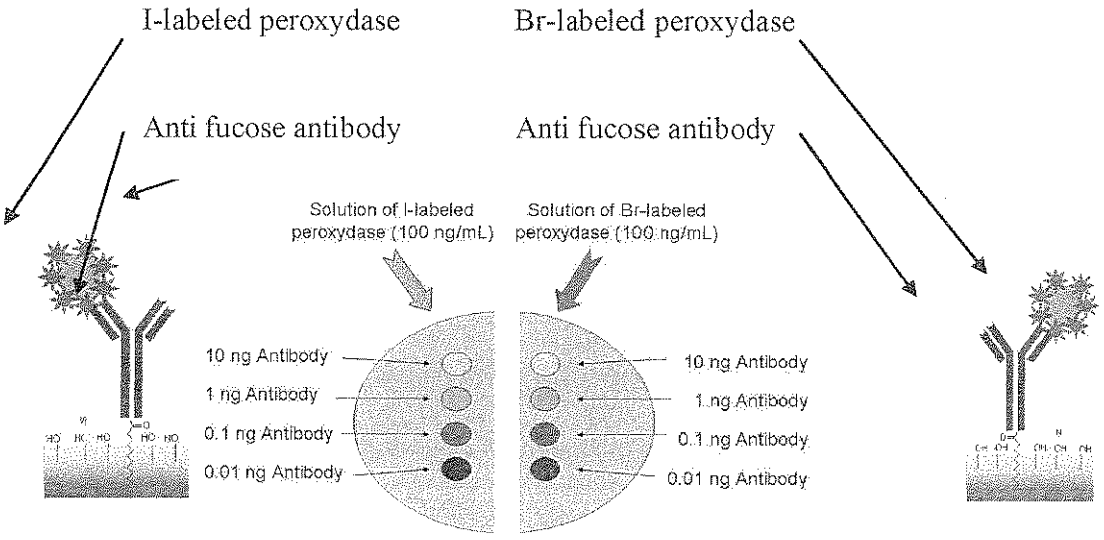

I-labeled peroxydase
Br-labeled peroxydase
Anti fucose antibody
Anti fucose antibody
Solution of I-labeled peroxydase (100 ng/mL)
Solution of Br-labeled peroxydase (100 ng/mL)
10 ng Antibody
1 ng Antibody
0.1 ng Antibody
0.01 ng Antibody
10 ng Antibody
1 ng Antibody
0.1 ng Antibody
0.01 ng Antibody

Fig. 3

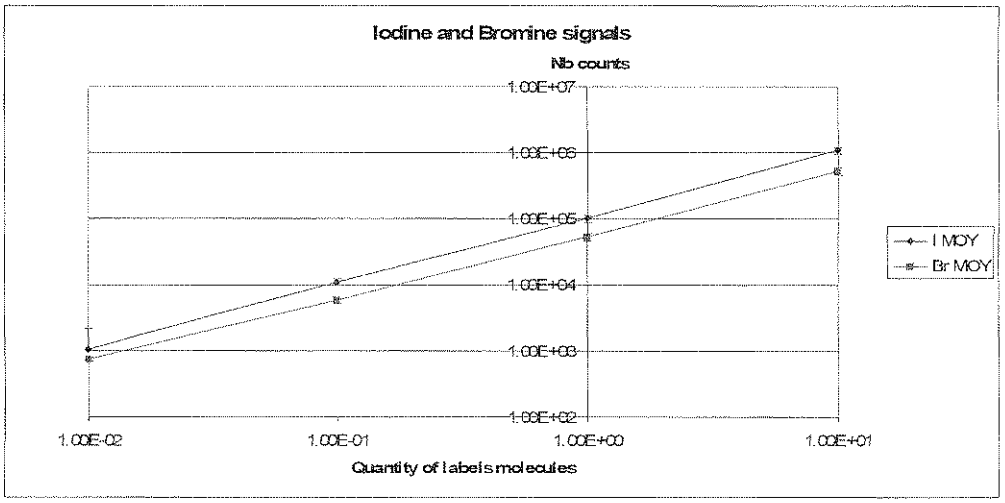

Iodine and Bromine signals
Nb counts
1.00E+07
1.00E+06
1.00E+05
1.00E+04
1.00E+03
1.00E+02
1.00E-02
1.00E-01
1.00E+00
1.00E+01
Quantity of labels molecules
I MOY
Br MOY

Fig. 4

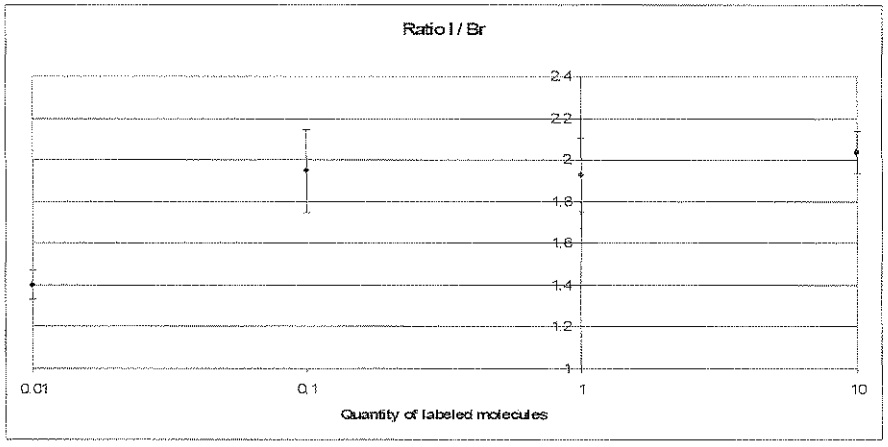

Ratio I / Br
2.4
2.2
2
1.8
1.6
1.4
1.2
1
0.01
0.1
1
10
Quantity of labeled molecules

Fig. 5

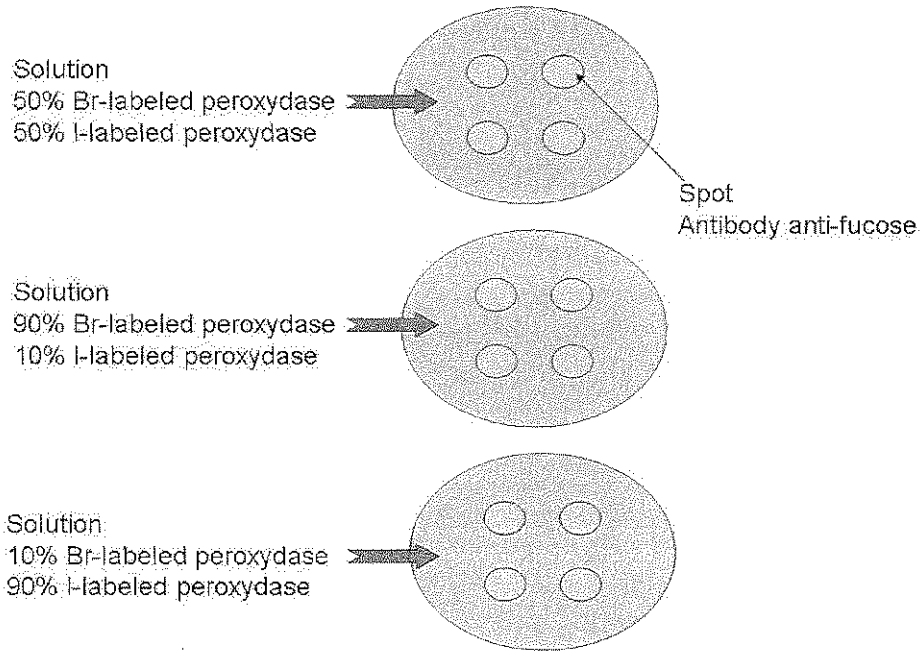

Solution
50% Br-labeled peroxydase
50% I-labeled peroxydase
Spot
Antibody anti-fucose
Solution
90% Br-labeled peroxydase
10% I-labeled peroxydase
Solution
10% Br-labeled peroxydase
90% I-labeled peroxydase

Fig. 6

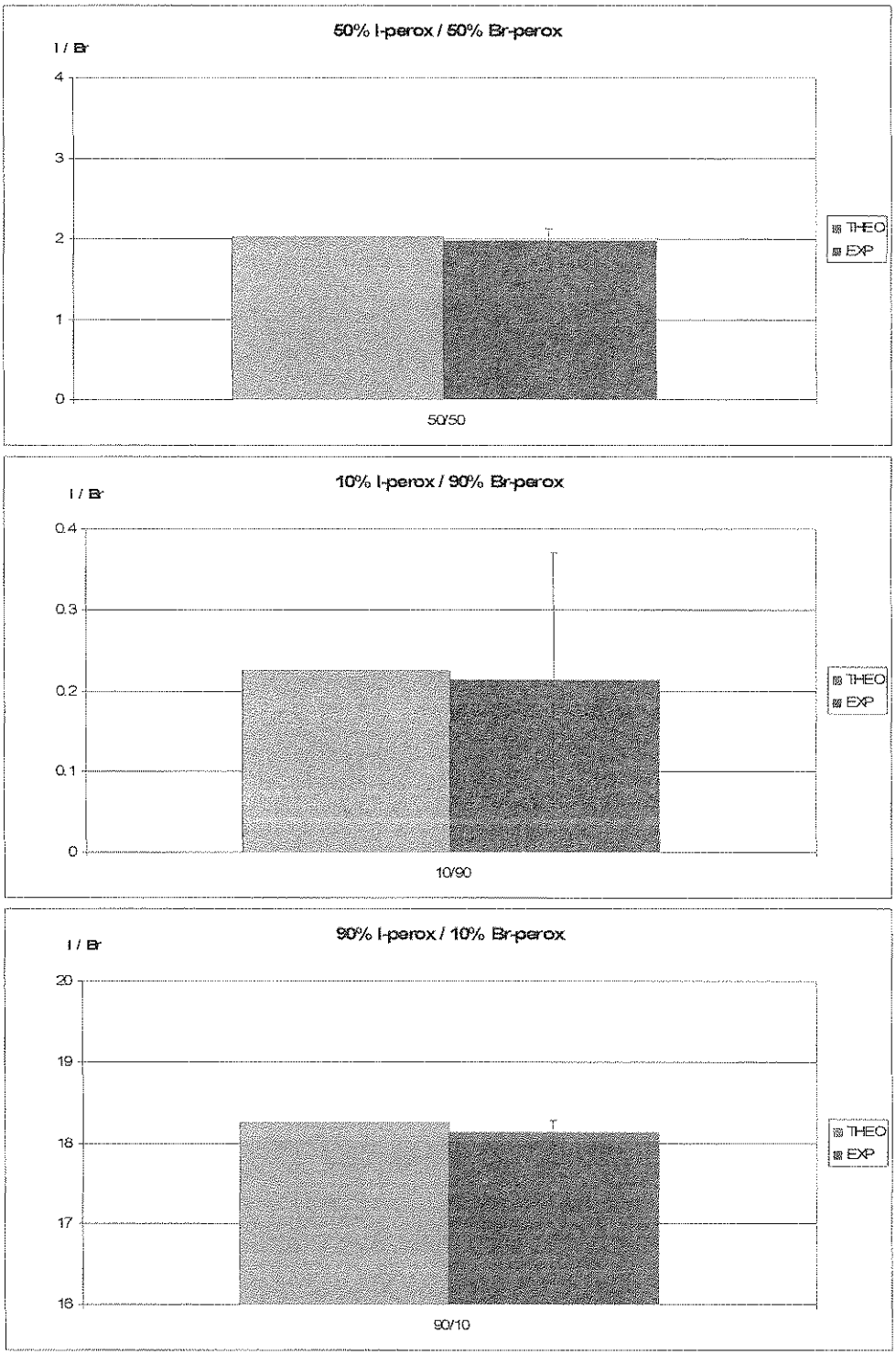

50% I-perox / 50% Br-perox
I / Br
4
3
2
1
0
50/50
THEO
EXP
10% I-perox / 90% Br-perox
I / Br
0.4
0.3
0.2
0.1
0
10/90
THEO
EXP
90% I-perox / 10% Br-perox
I / Br
20
19
18
17
16
90/10
THEO
EXP

Fig. 7

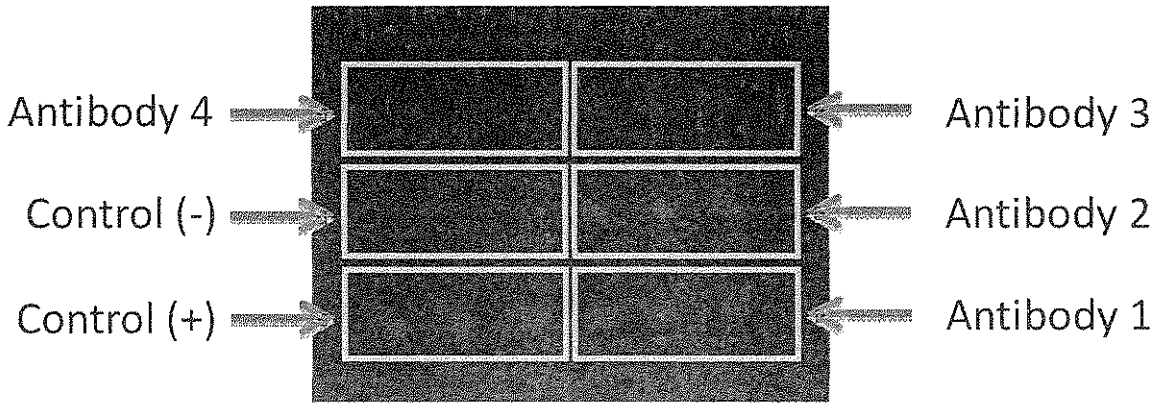

Antibody 4
Control (-)
Control (+)
Antibody 3
Antibody 2
Antibody 1

Fig. 8

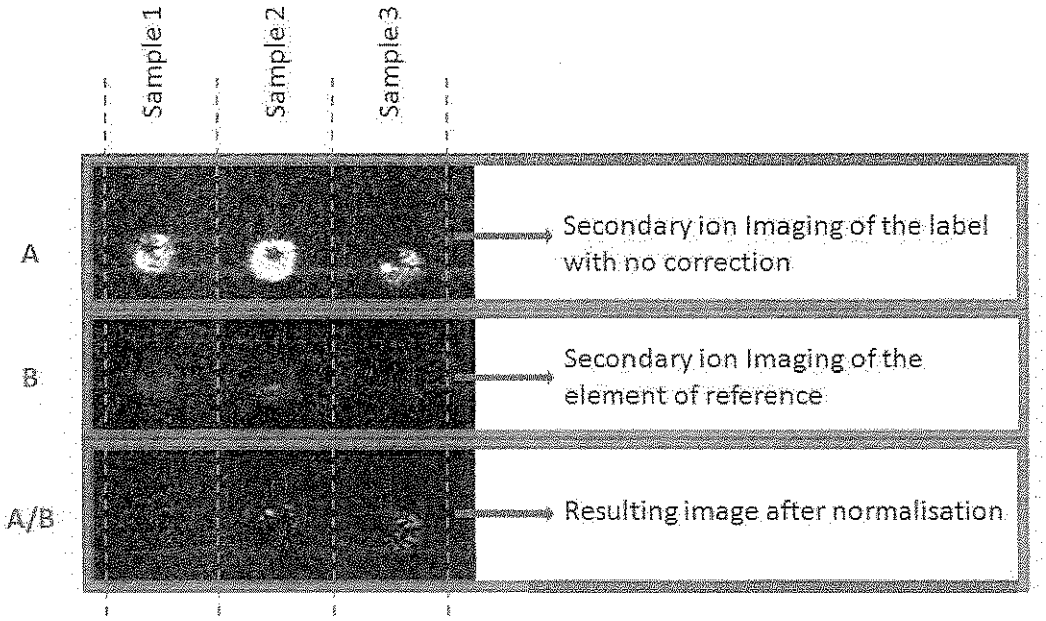
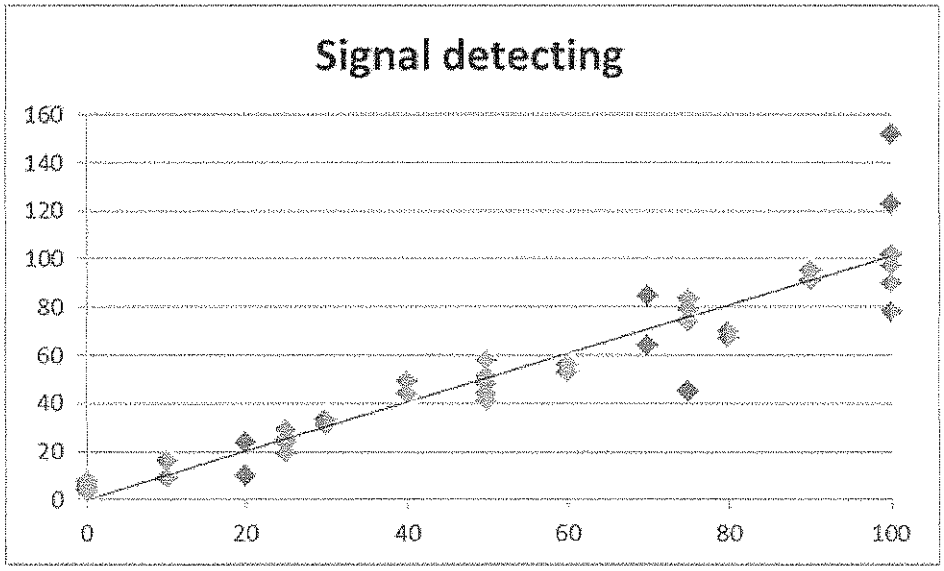

Sample 1
Sample 2
Sample 3
A
B
A/B
Secondary ion Imaging of the label with no correction
Secondary ion Imaging of the element of reference
Resulting image after normalisation

Fig. 9


Signal detecting
160
140
120
100
80
60
40
20
0
0
20
40
60
80
100

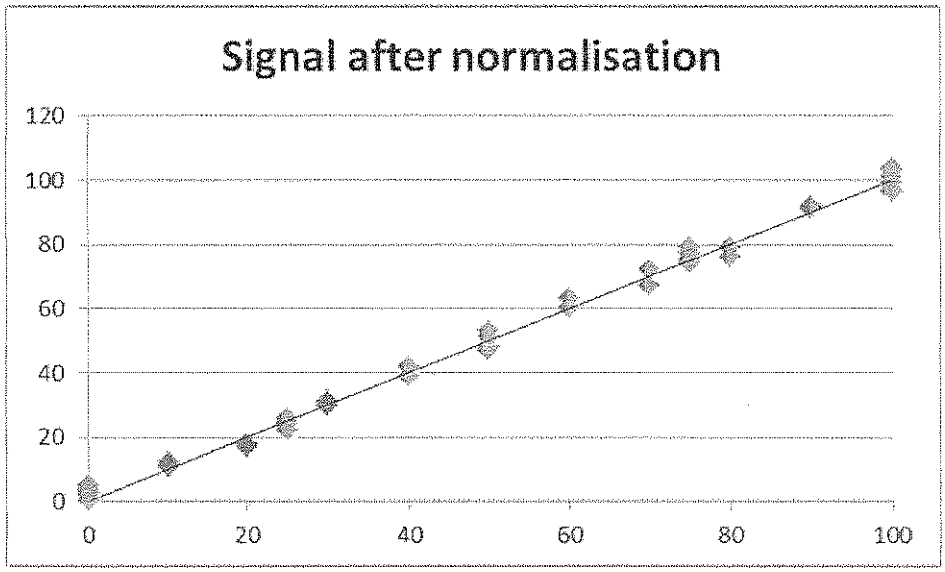

Signal after normalisation
120
100
80
60
40
20
0
0
20
40
60
80
100

Fig. 10

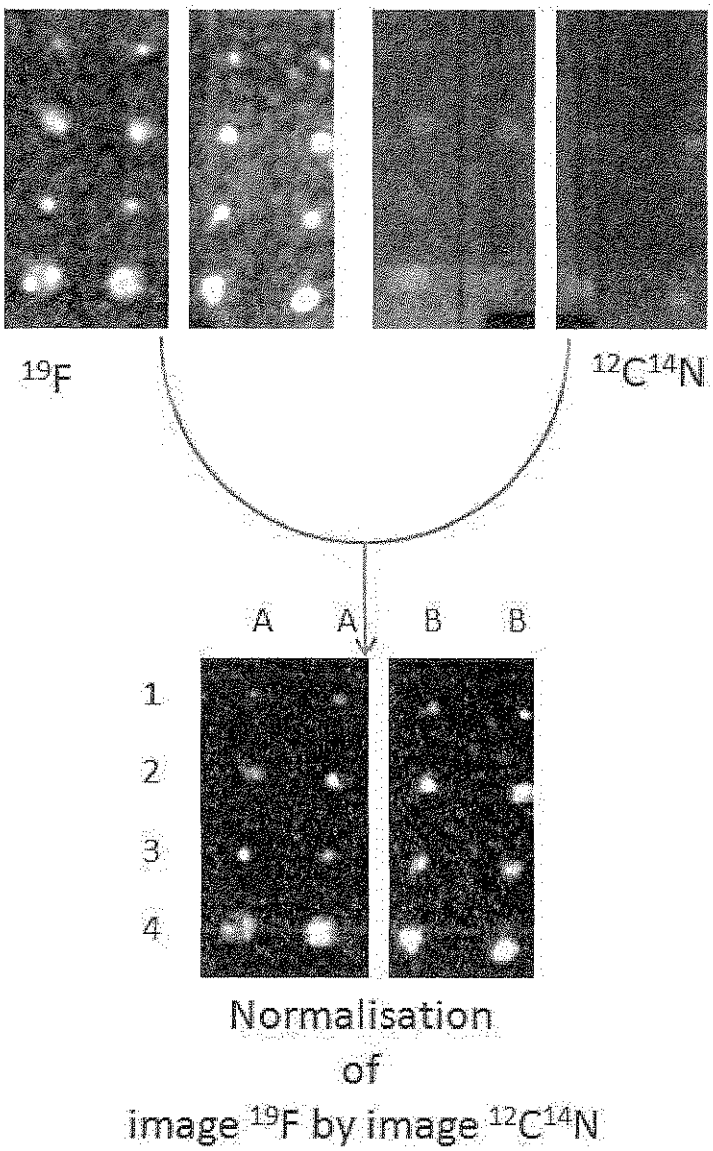

^{19}F
$^{12}C^{14}N$
A
A
B
B
1
2
3
4
Normalisation
of
image ^{19}F by image $^{12}C^{14}N$

Fig. 11