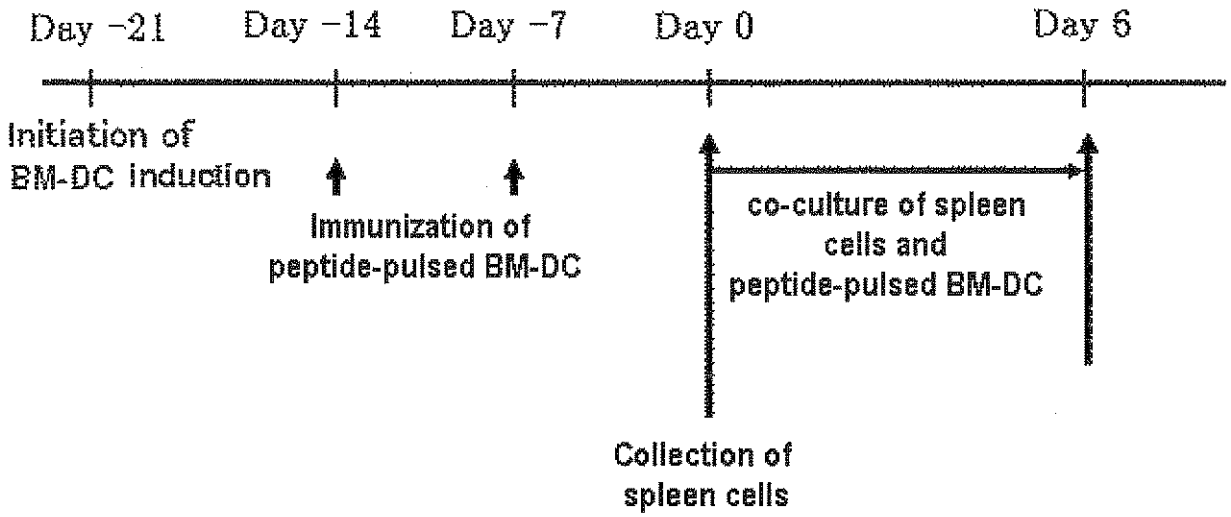

Day -21
Day -14
Day -7
Day 0
Day 6
Initiation of
BM-DC induction
Immunization of
peptide-pulsed BM-DC
co-culture of spleen
cells and
peptide-pulsed BM-DC
Collection of
spleen cells

FIG. 1

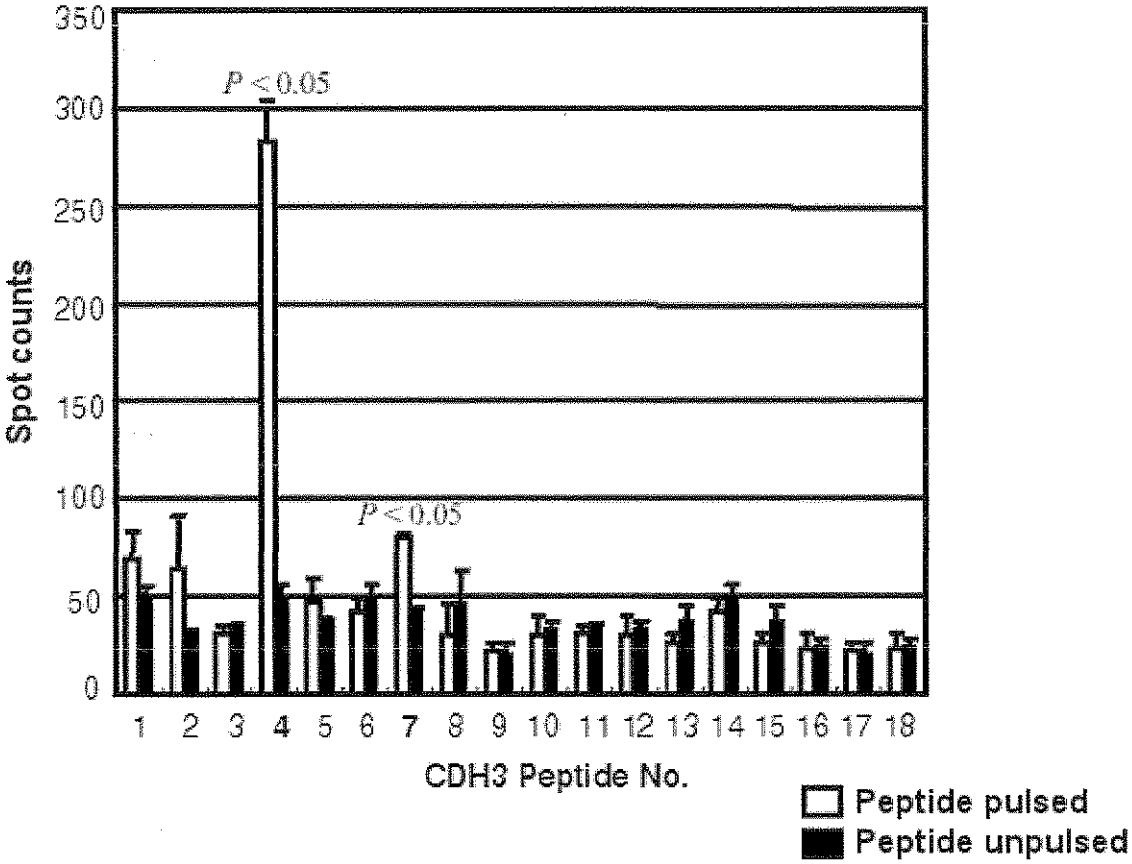

350
300
250
200
150
100
50
0
Spot counts
P < 0.05
P < 0.05
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
CDH3 Peptide No.
Peptide pulsed
Peptide unpulsed

FIG. 2

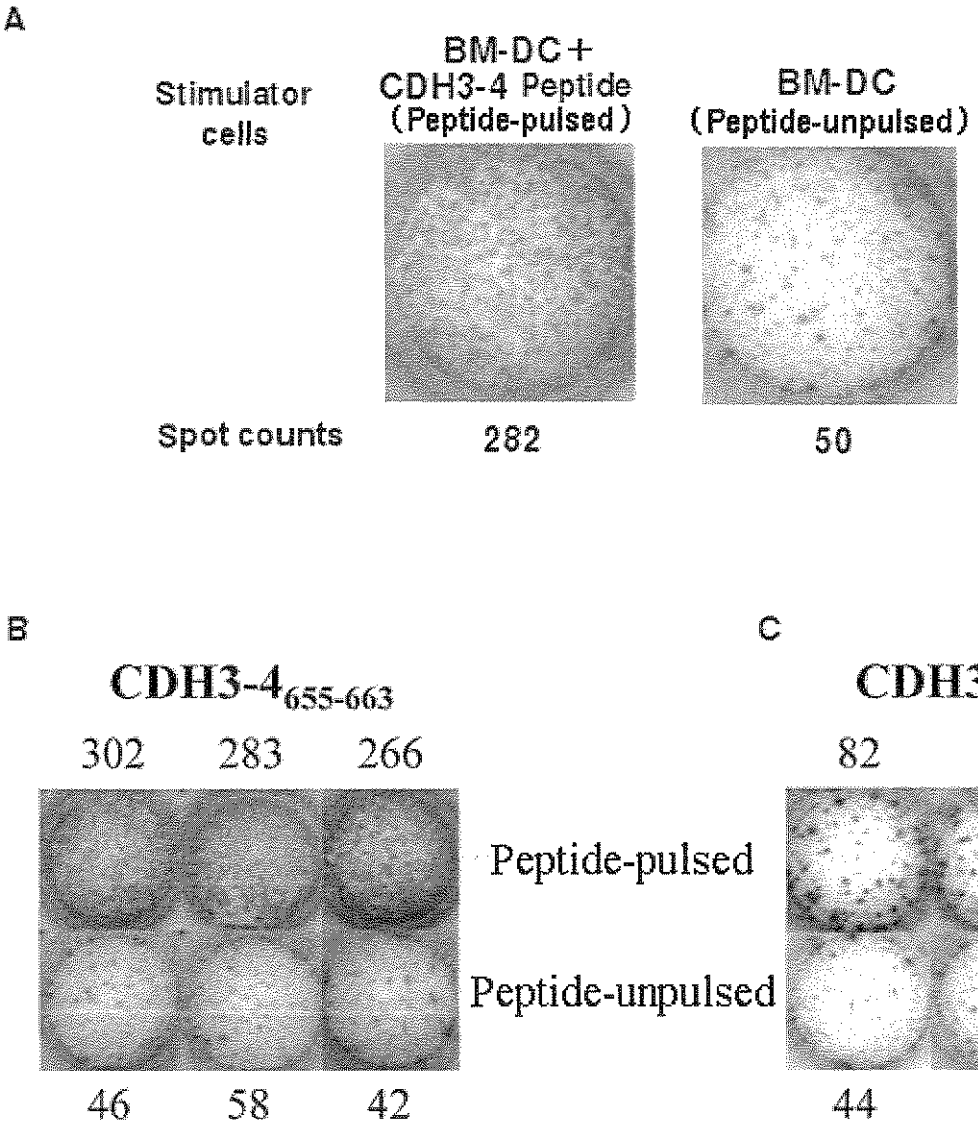

A
Stimulator cells
BM-DC+ CDH3-4 Peptide (Peptide-pulsed)
BM-DC (Peptide-unpulsed)
Spot counts
282
50
B
CDH3-4655-663
302
283
266
Peptide-pulsed
Peptide-unpulsed
46
58
42
C
CDH3-7757-765
82
76
80
44
42
42

FIG. 3

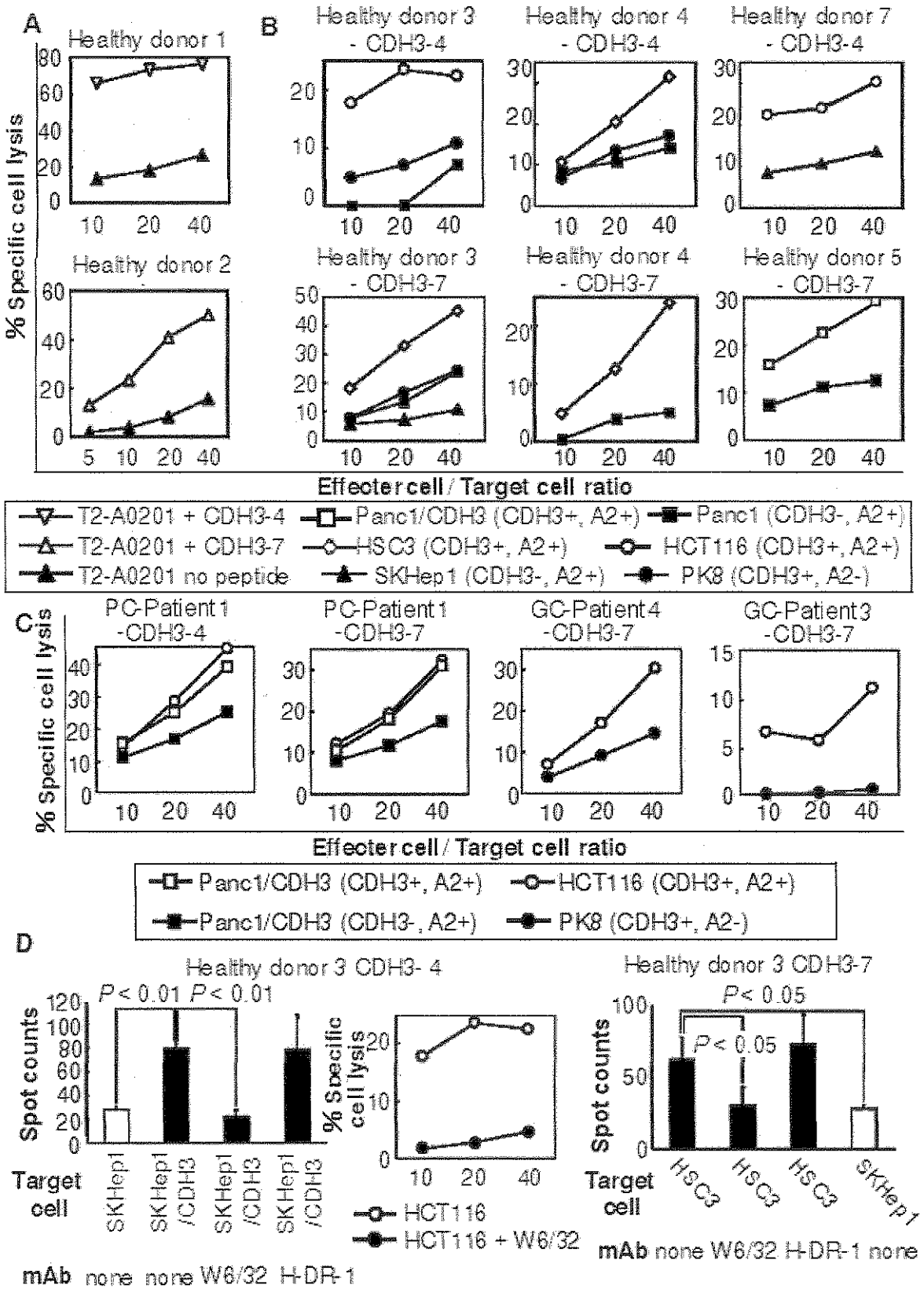

A
Healthy donor 1
Healthy donor 2
% Specific cell lysis
B
Healthy donor 3 - CDH3-4
Healthy donor 4 - CDH3-4
Healthy donor 7 - CDH3-4
Healthy donor 3 - CDH3-7
Healthy donor 4 - CDH3-7
Healthy donor 5 - CDH3-7
Effecter cell / Target cell ratio
T2-A0201 + CDH3-4
T2-A0201 + CDH3-7
T2-A0201 no peptide
Panc1/CDH3 (CDH3+, A2+)
HSC3 (CDH3+, A2+)
SKHep1 (CDH3-, A2+)
Panc1 (CDH3-, A2+)
HCT116 (CDH3+, A2+)
PK8 (CDH3+, A2-)
C
PC-Patient1 -CDH3-4
PC-Patient1 -CDH3-7
GC-Patient4 -CDH3-7
GC-Patient3 -CDH3-7
% Specific cell lysis
Effecter cell / Target cell ratio
Panc1/CDH3 (CDH3+, A2+)
Panc1/CDH3 (CDH3-, A2+)
HCT116 (CDH3+, A2+)
PK8 (CDH3+, A2-)
D
Healthy donor 3 CDH3- 4
P < 0.01 P < 0.01
Spot counts
Target cell
SKHep1
SKHep1 /CDH3
SKHep1 /CDH3
SKHep1 /CDH3
mAb none none W6/32 HLA-DR-1
% Specific cell lysis
HCT116
HCT116 + W6/32
Healthy donor 3 CDH3-7
P < 0.05
P < 0.05
Spot counts
Target cell
HSC3
HSC3
HSC3
SKHep1
mAb none W6/32 HLA-DR-1 none

FIG. 4

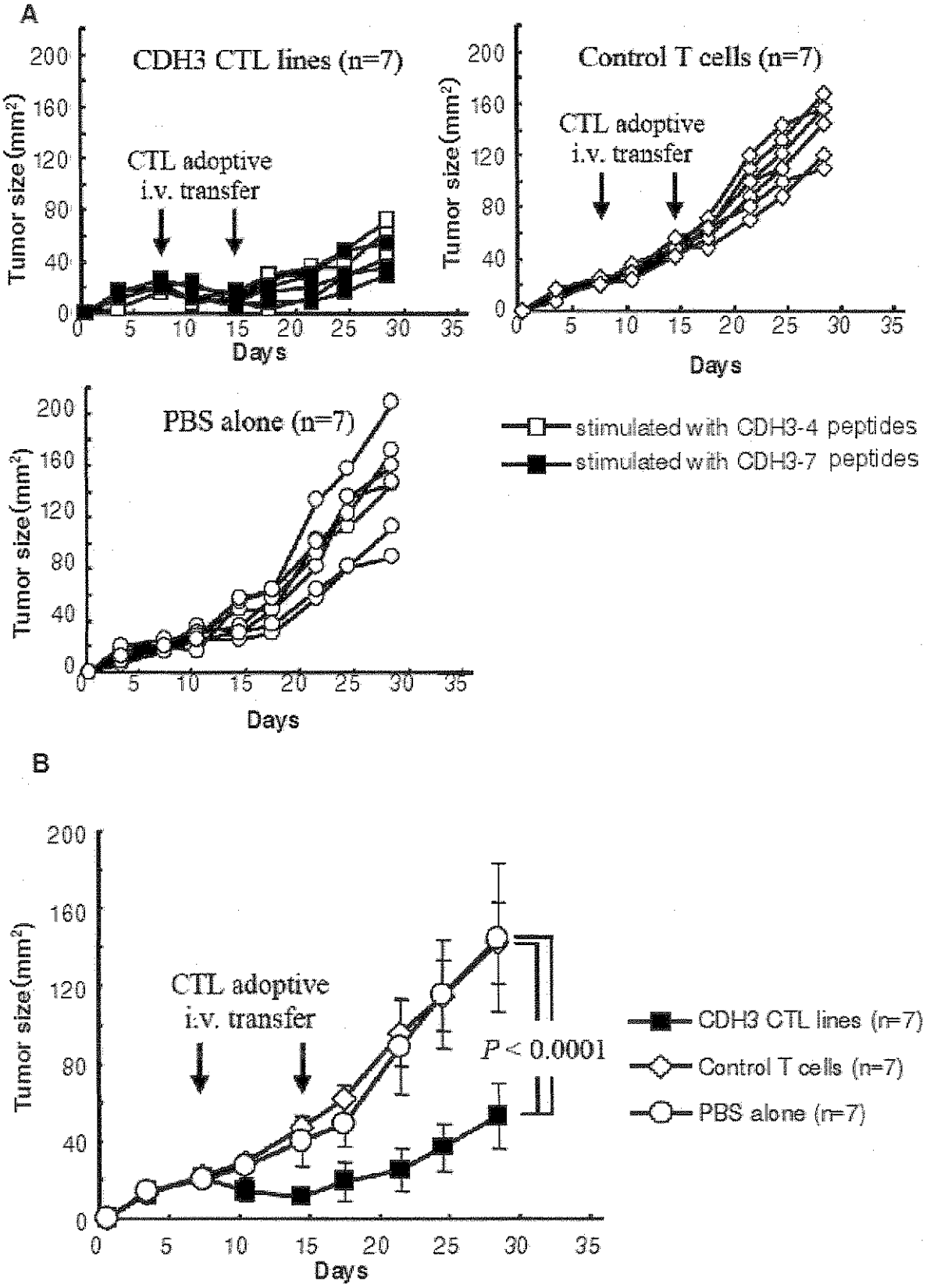

A
CDH3 CTL lines (n=7)
CTL adoptive
i.v. transfer
Tumor size (mm²)
Days
Control T cells (n=7)
CTL adoptive
i.v. transfer
Tumor size (mm²)
Days
PBS alone (n=7)
Tumor size (mm²)
Days
stimulated with CDH3-4 peptides
stimulated with CDH3-7 peptides
B
CTL adoptive
i.v. transfer
P < 0.0001
Tumor size (mm²)
Days
CDH3 CTL lines (n=7)
Control T cells (n=7)
PBS alone (n=7)

FIG. 5