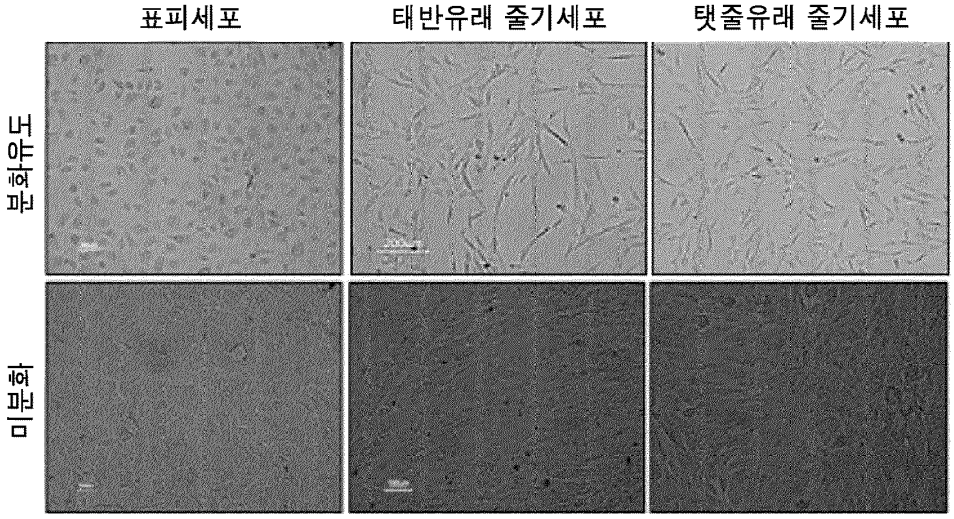
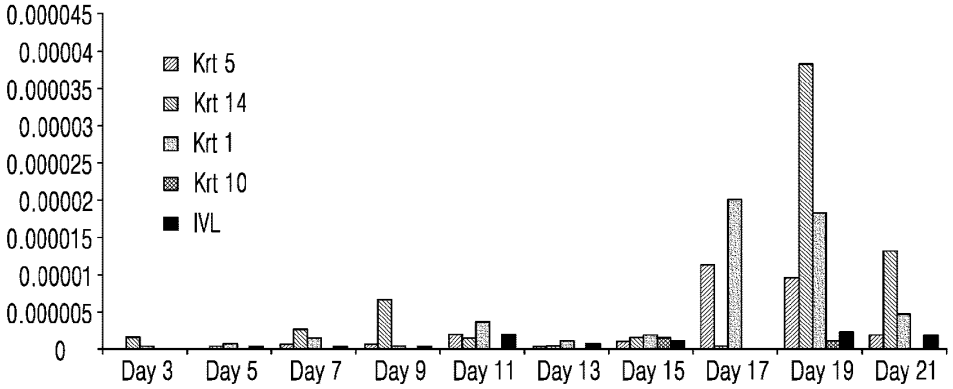
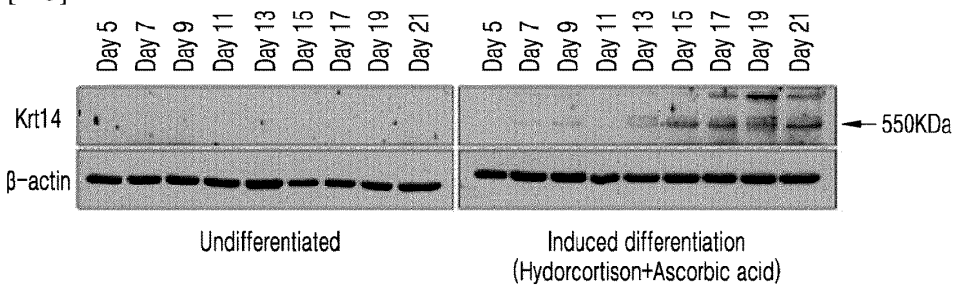
[도1]


표피세포
태반유래 줄기세포
탯줄유래 줄기세포
분화유도
미분화

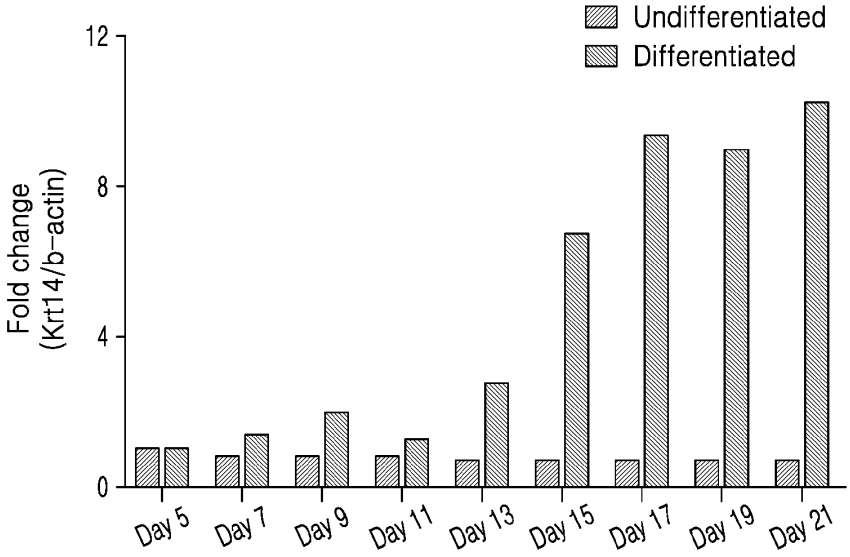
[도2]


0.000045
0.00004
0.000035
0.00003
0.000025
0.00002
0.000015
0.00001
0.000005
0
Krt 5
Krt 14
Krt 1
Krt 10
IVL
Day 3
Day 5
Day 7
Day 9
Day 11
Day 13
Day 15
Day 17
Day 19
Day 21

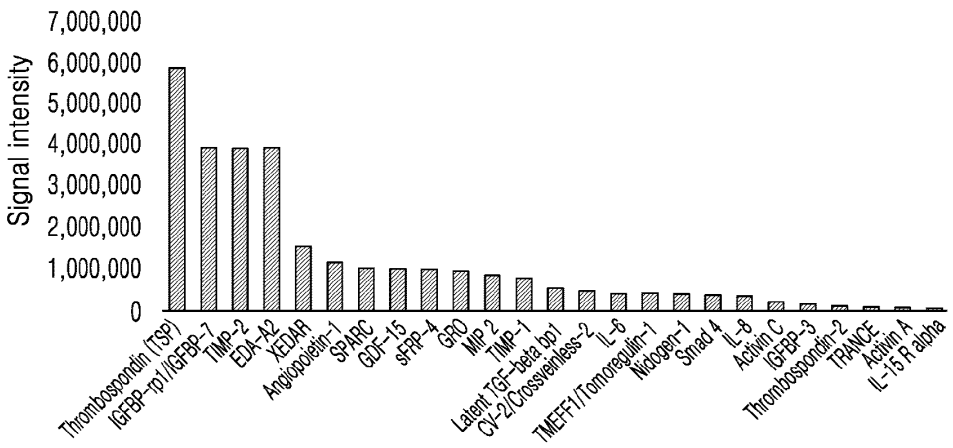
[도3]


Day 5
Day 7
Day 9
Day 11
Day 13
Day 15
Day 17
Day 19
Day 21
Krt14
β-actin
550KDa
Undifferentiated
Induced differentiation
(Hydorcortison+Ascorbic acid)

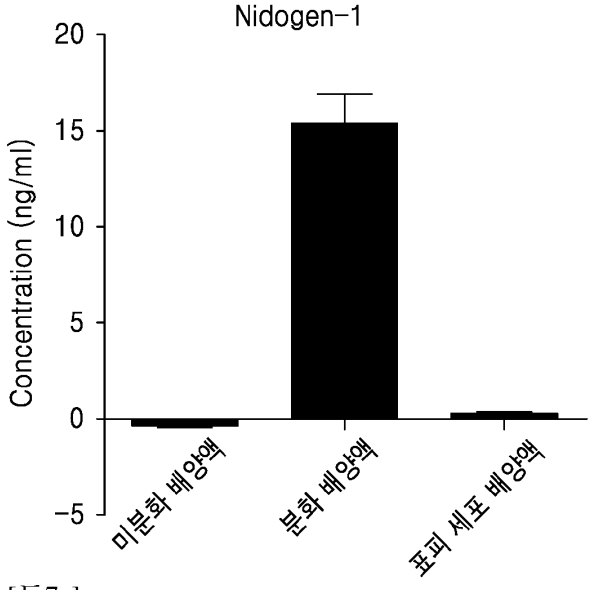
[도4]


Krt 14
Undifferentiated
Differentiated
Fold change
(Krt14/b-actin)
12
8
4
0
Day 5
Day 7
Day 9
Day 11
Day 13
Day 15
Day 17
Day 19
Day 21

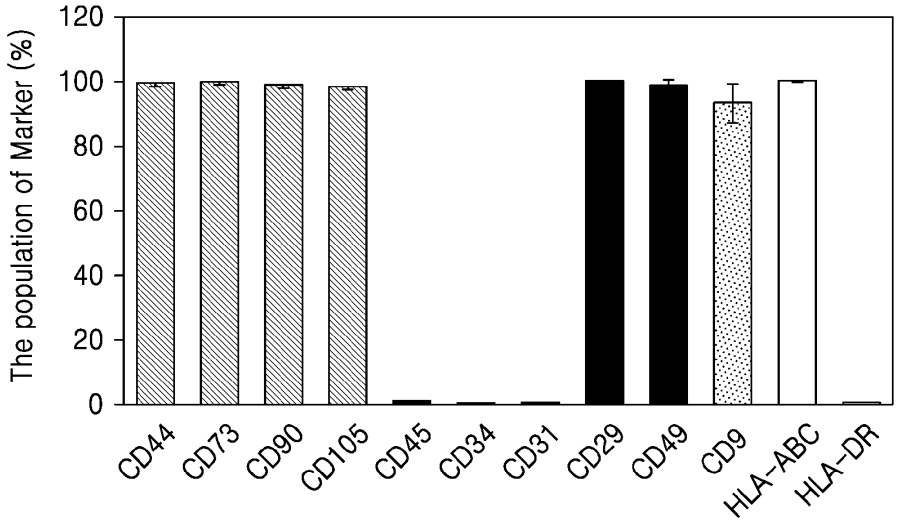
[도5]


분화배양액 cytokines
Signal intensity
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
Thrombospondin (TSP)
IGFBP-rp1/IGFBP-7
TIMP-2
EDA-A2
XEDAR
Angiopoietin-1
SPARC
GDF-15
sFRP-4
GRO
MIP 2
TIMP-1
Latent TGF-beta bp1
CV-2/Crossveinless-2
IL-6
TMEFF1/Tomoregulin-1
Nidogen-1
Smad 4
IL-8
Activin C
IGFBP-3
Thrombospondin-2
TRANCE
Activin A
IL-15 R alpha

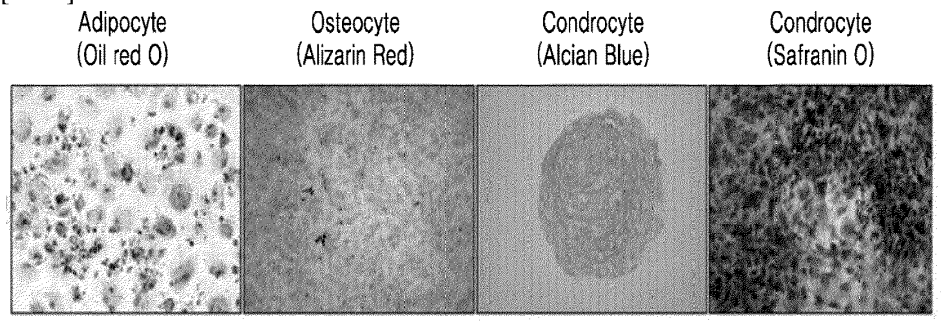
[도6]


Nidogen-1
Concentration (ng/ml)
20
15
10
5
0
-5
미분화 배양액
분화 배양액
표피 세포 배양액

[도7a]


The population of Marker (%)
120
100
80
60
40
20
0
CD44
CD73
CD90
CD105
CD45
CD34
CD31
CD29
CD49
CD9
HLA-ABC
HLA-DR

[도7b]


Adipocyte
(Oil red O)
Osteocyte
(Alizarin Red)
Condrocyte
(Alcian Blue)
Condrocyte
(Safranin O)