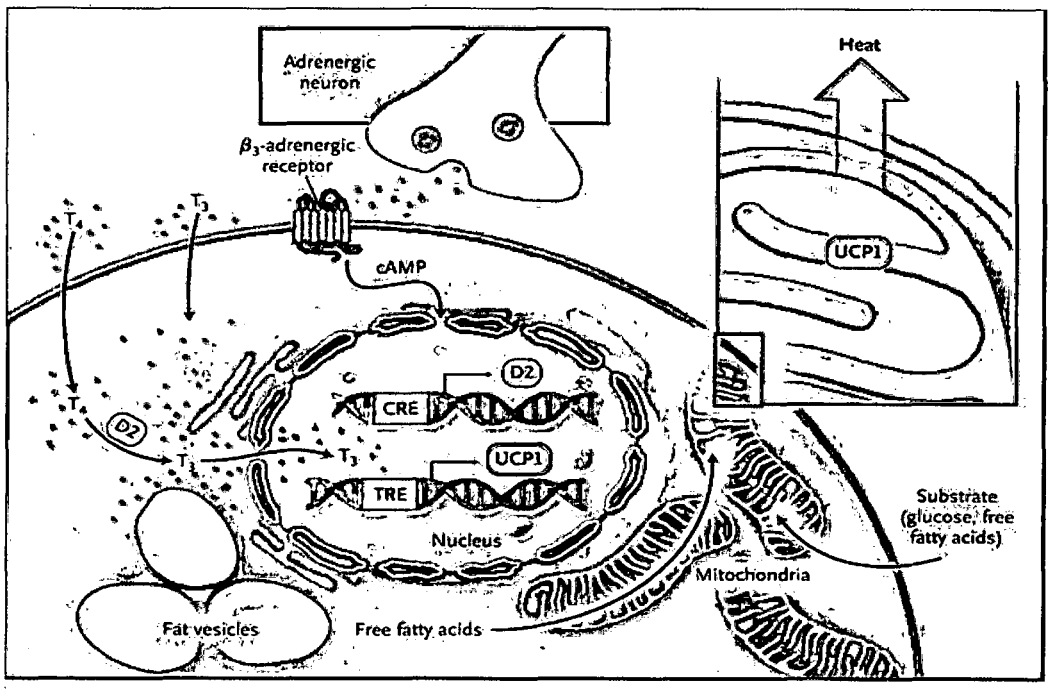


Figure from: Celi, F.S. NEJM. 360, 1553-6 (2009)

FIG. 1

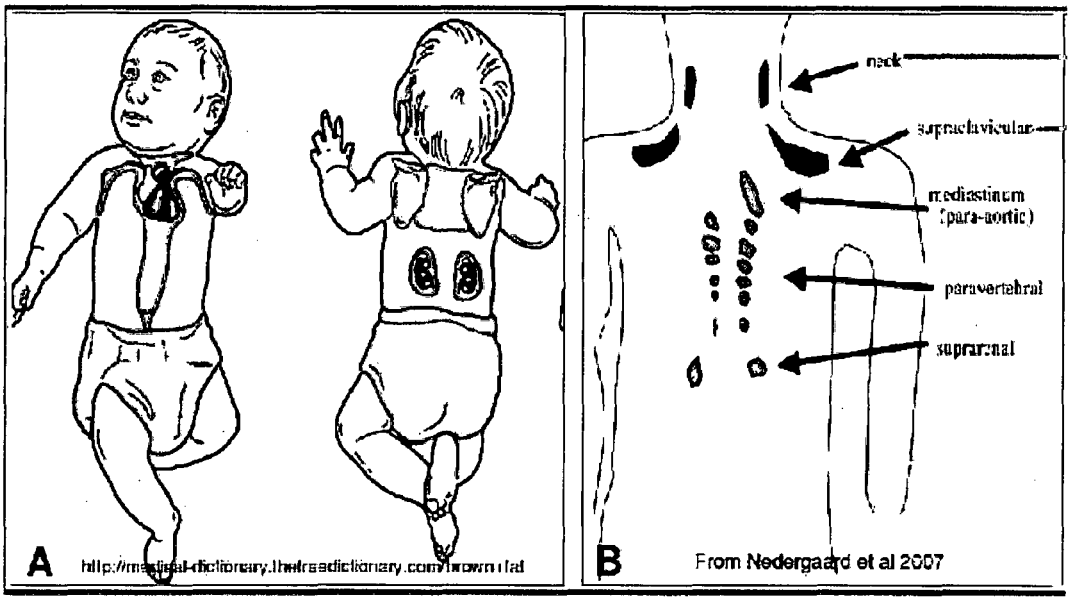


FIG. 2

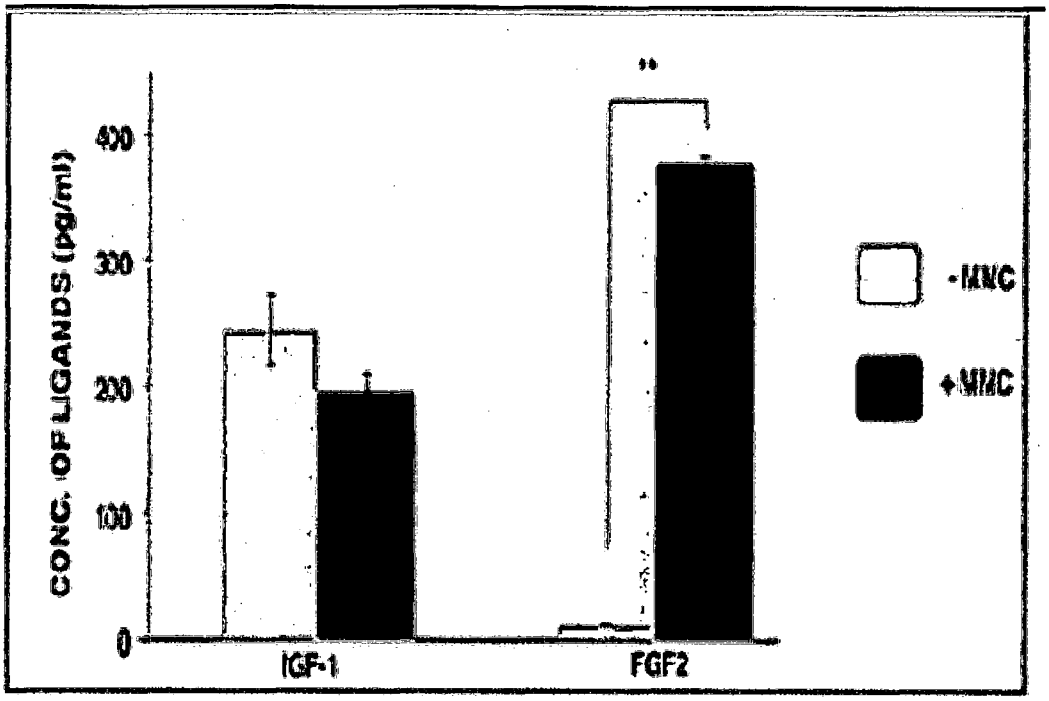

CONC. OF LIGANDS (pg/ml)
400
300
200
100
0
**
-MMC
+MMC
IGF-1
FGF2

FIG. 3

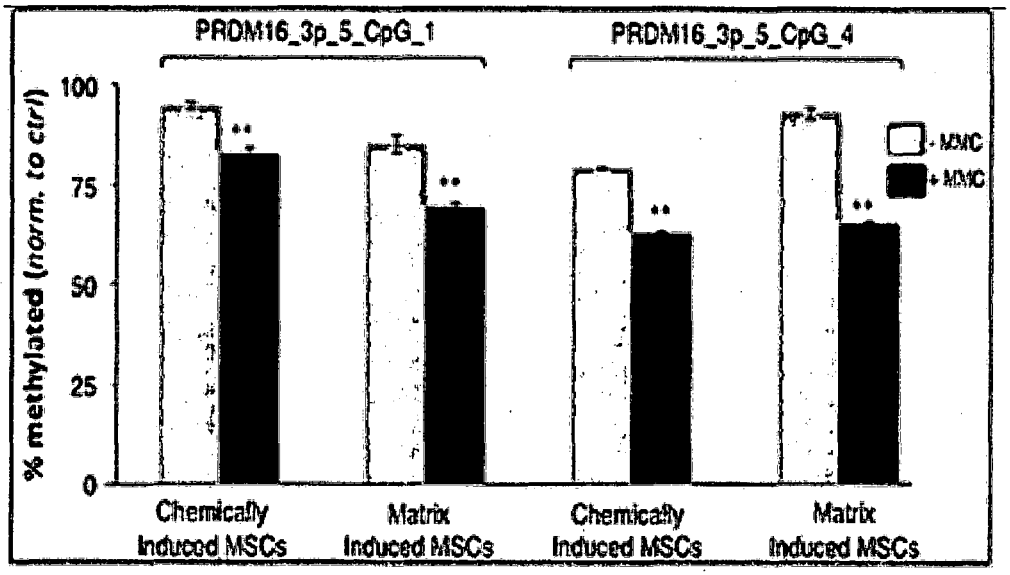

PRDM16_3p_5_CpG_1
PRDM16_3p_5_CpG_4
% methylated (norm. to ctrl)
100
75
50
25
0
**
-MMC
+MMC
Chemically Induced MSCs
Matrix Induced MSCs
Chemically Induced MSCs
Matrix Induced MSCs

FIG. 4

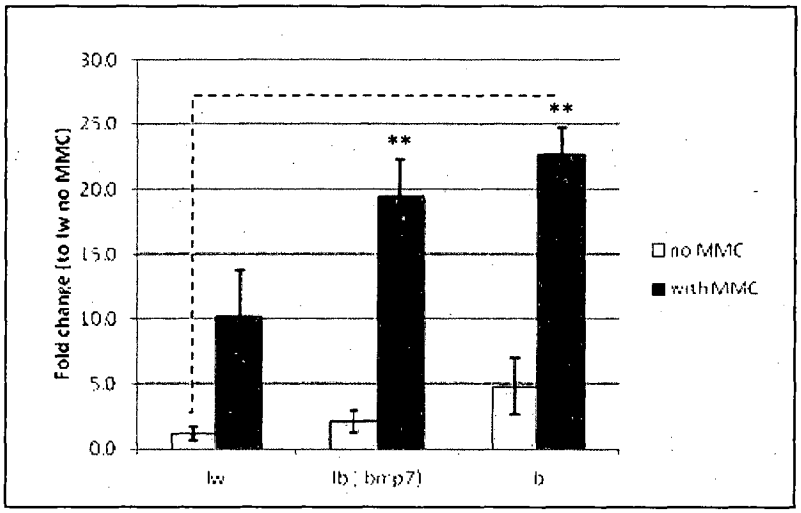

30.0
25.0
20.0
15.0
10.0
5.0
0.0
Fold change (to lw no MMC)
**
**
no MMC
with MMC
lw
lb (bmp7)
b

FIG. 5

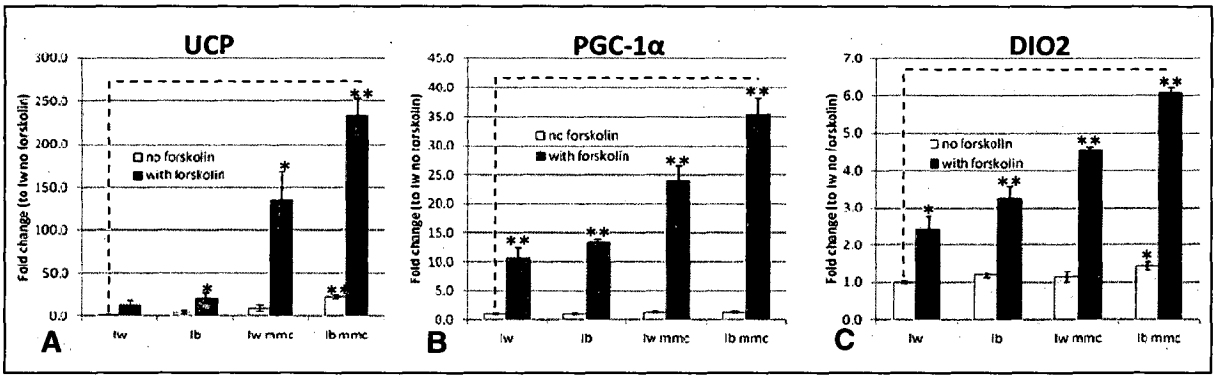

UCP
PGC-1α
DIO2
Fold change (to lw no forskolin)
no forskolin
with forskolin
lw
lb
lw mmc
lb mmc
A
B
C

FIG. 6

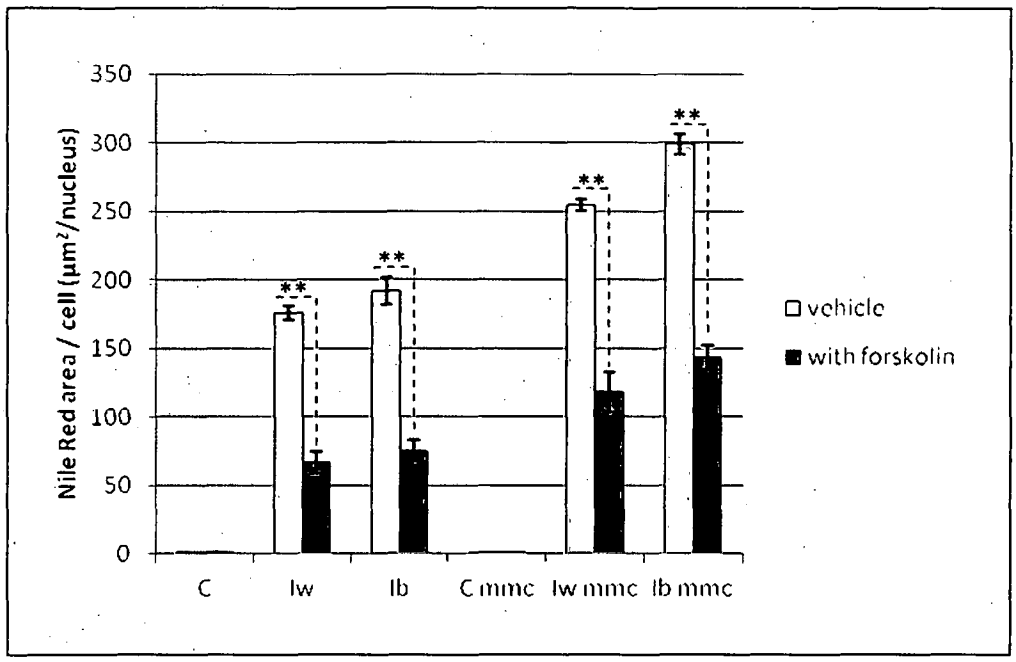

Nile Red area / cell (µm²/nucleus)
350
300
250
200
150
100
50
0
**
**
**
**
C
lw
lb
C mmc
lw mmc
lb mmc
vehicle
with forskolin

FIG. 7

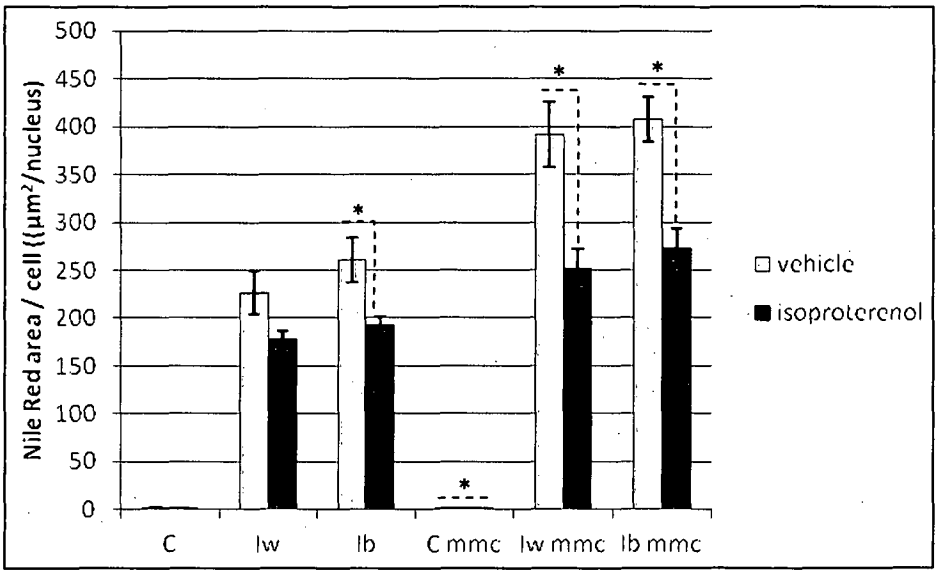

Nile Red area / cell ((µm²/nucleus)
500
450
400
350
300
250
200
150
100
50
0
*
*
*
*
C
lw
lb
C mmc
lw mmc
lb mmc
vehicle
isoproterenol

FIG. 8

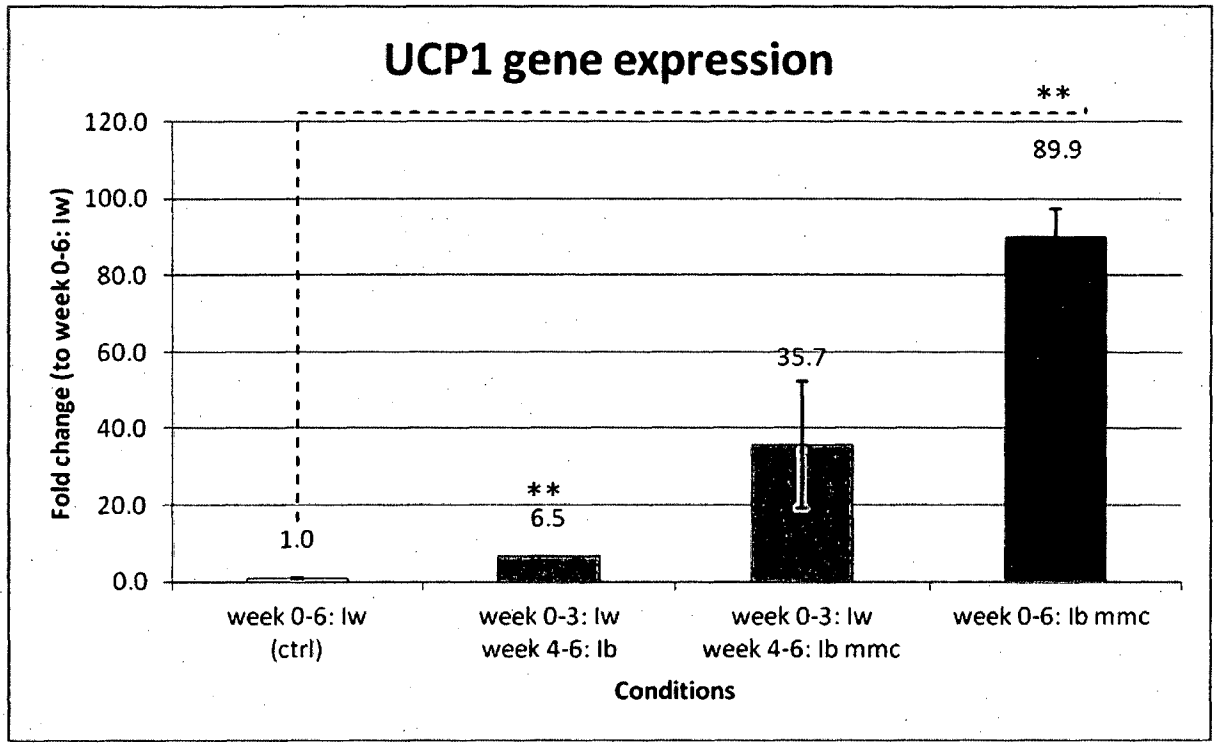

UCP1 gene expression
Fold change (to week0-6: lw)
120.0
100.0
80.0
60.0
40.0
20.0
0.0
**
89.9
35.7
**
6.5
1.0
week 0-6: lw (ctrl)
week 0-3: lw week 4-6: lb
week 0-3: lw week 4-6: lb mmc
week 0-6: lb mmc
Conditions

FIG. 9

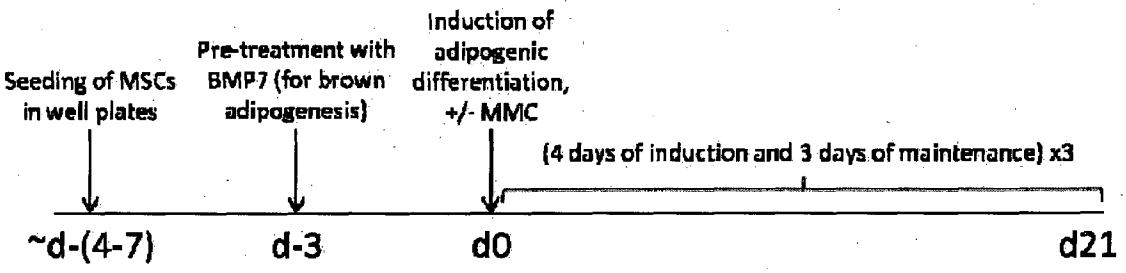

Seeding of MSCs in well plates
Pre-treatment with BMP7 (for brown adipogenesis)
Induction of adipogenic differentiation, +/- MMC
(4 days of induction and 3 days of maintenance) x3
~d-(4-7)
d-3
d0
d21

FIG. 10