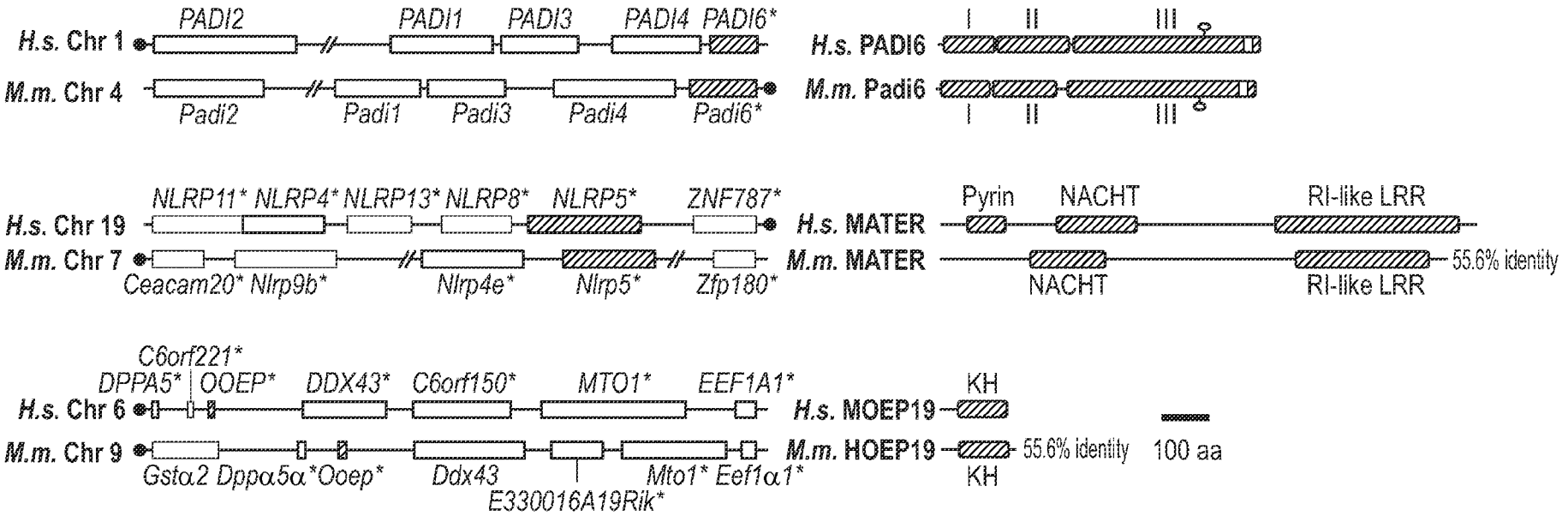

H.s. Chr 1
PADI2
PADI1
PADI3
PADI4
PADI6*
M.m. Chr 4
Padi2
Padi1
Padi3
Padi4
Padi6*
H.s. PADI6
M.m. Padi6
I
II
III
H.s. Chr 19
NLRP11*
NLRP4*
NLRP13*
NLRP8*
NLRP5*
ZNF787*
M.m. Chr 7
Ceacam20*
Nlrp9b*
Nlrp4e*
Nlrp5*
Zfp180*
H.s. MATER
M.m. MATER
Pyrin
NACHT
RI-like LRR
55.6% identity
H.s. Chr 6
C6orf221*
DPPA5*
OOEP*
DDX43*
C6orf150*
MTO1*
EEF1A1*
M.m. Chr 9
Gstα2
Dppα5α*
Ooep*
Ddx43
E330016A19Rik*
Mto1*
Eef1α1*
H.s. MOEP19
M.m. HOEP19
KH
55.6% identity
100 aa

FIG. 1

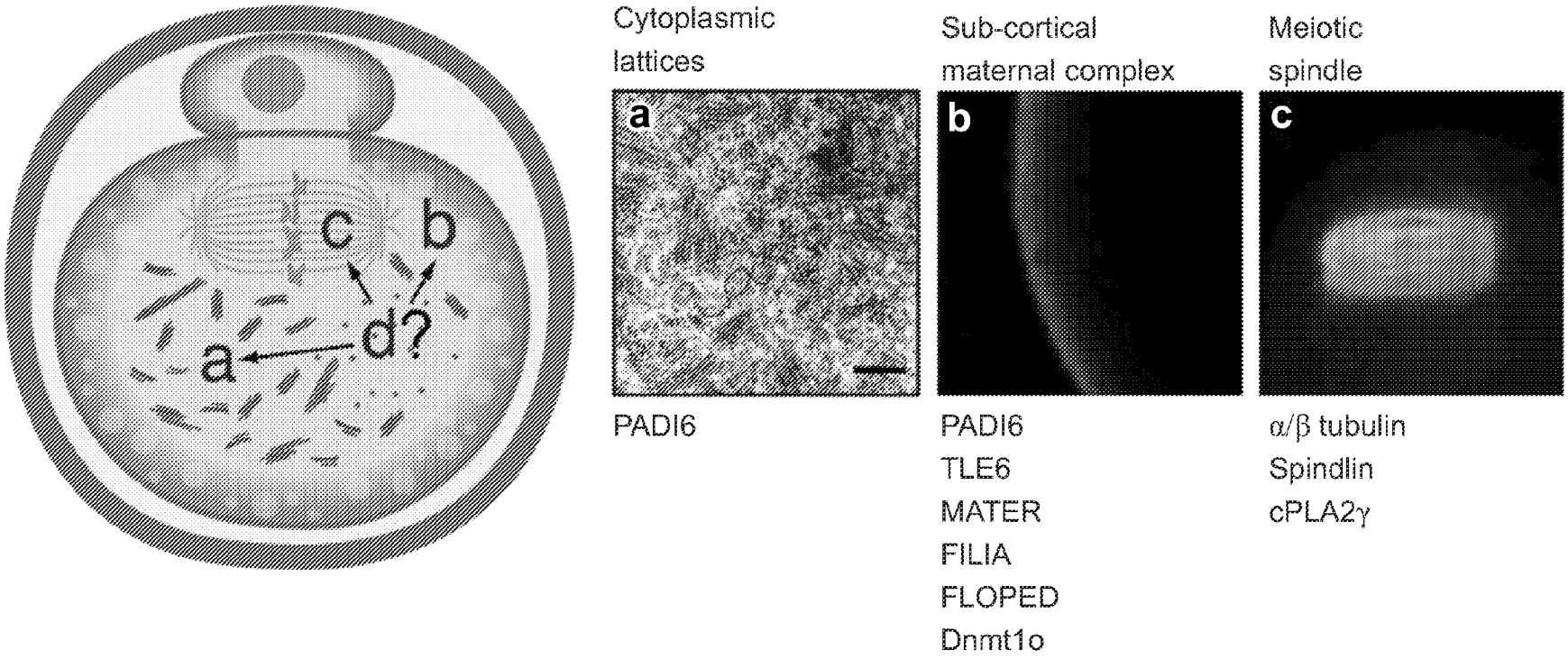

c
b
a
d?
Cytoplasmic lattices
Sub-cortical maternal complex
Meiotic spindle
a
b
c
PADI6
PADI6
TLE6
MATER
FILIA
FLOPED
Dnmt1o
α/β tubulin
Spindlin
cPLA2γ

FIG. 2

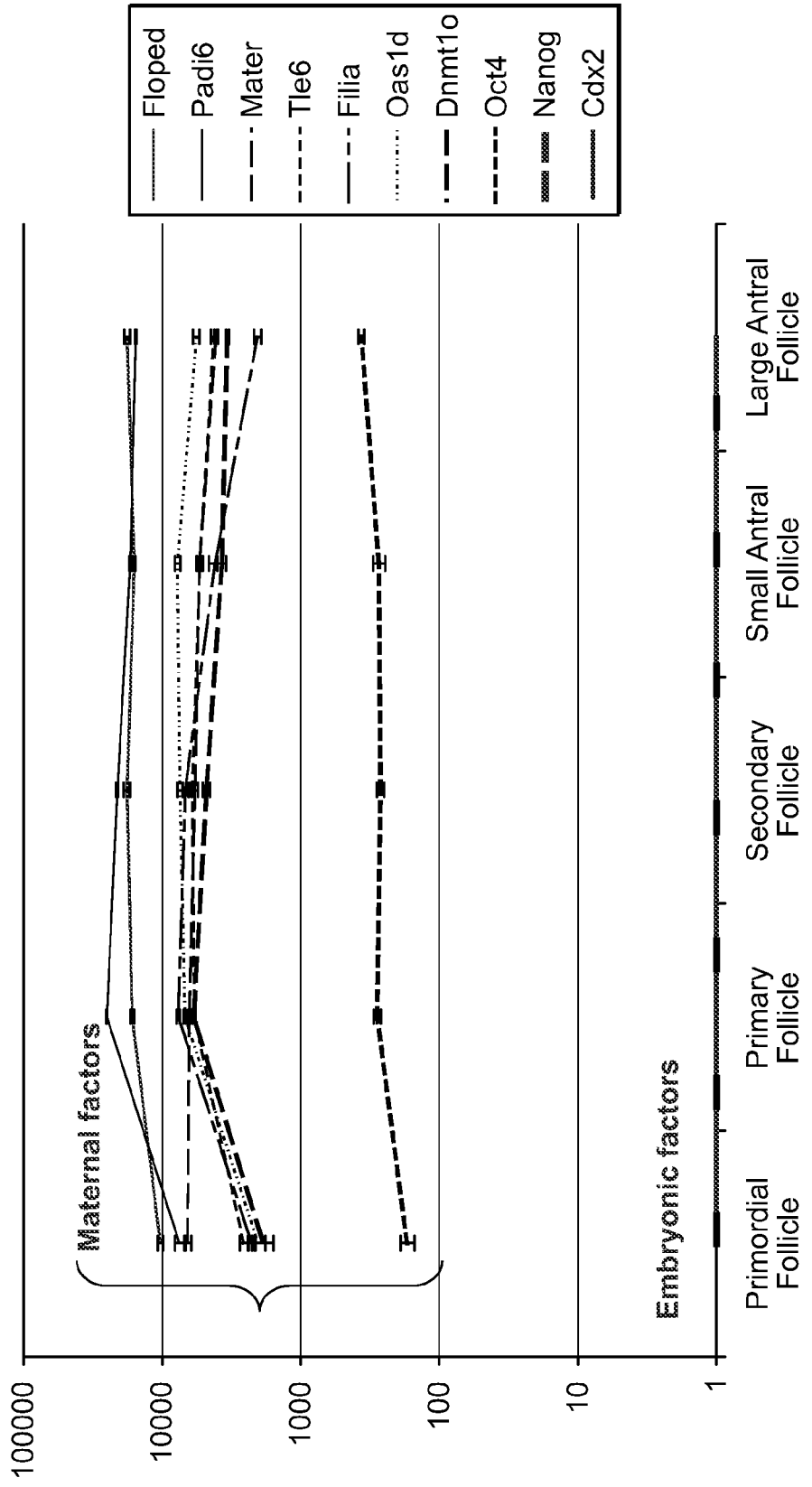

Gene Expression During Mouse Oocyte Development
100000
10000
1000
100
10
1
Maternal factors
Embryonic factors
Floped
Padi6
Mater
Tle6
Filia
Oas1d
Dnmt1o
Oct4
Nanog
Cdx2
Primordial Follicle
Primary Follicle
Secondary Follicle
Small Antral Follicle
Large Antral Follicle
Stage

FIG. 3

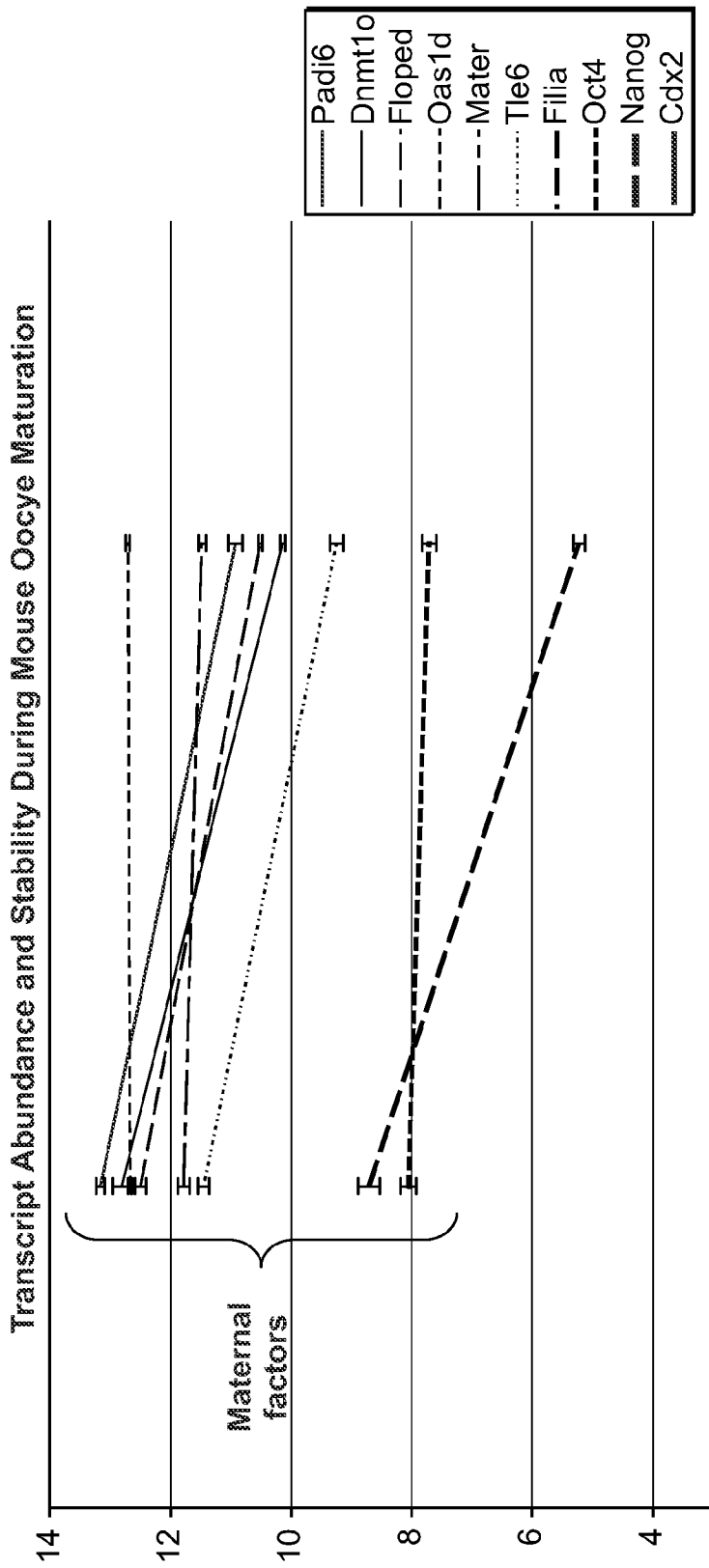

Transcript Abundance and Stability During Mouse Oocye Maturation
Padi6
Dnmt1o
Floped
Oas1d
Mater
Tle6
Filia
Oct4
Nanog
Cdx2
Maternal factors
Embryonic factors
14
12
10
8
6
4
2
0
Immature GV oocyte
Mature MII egg
Developmental Stage

FIG. 4

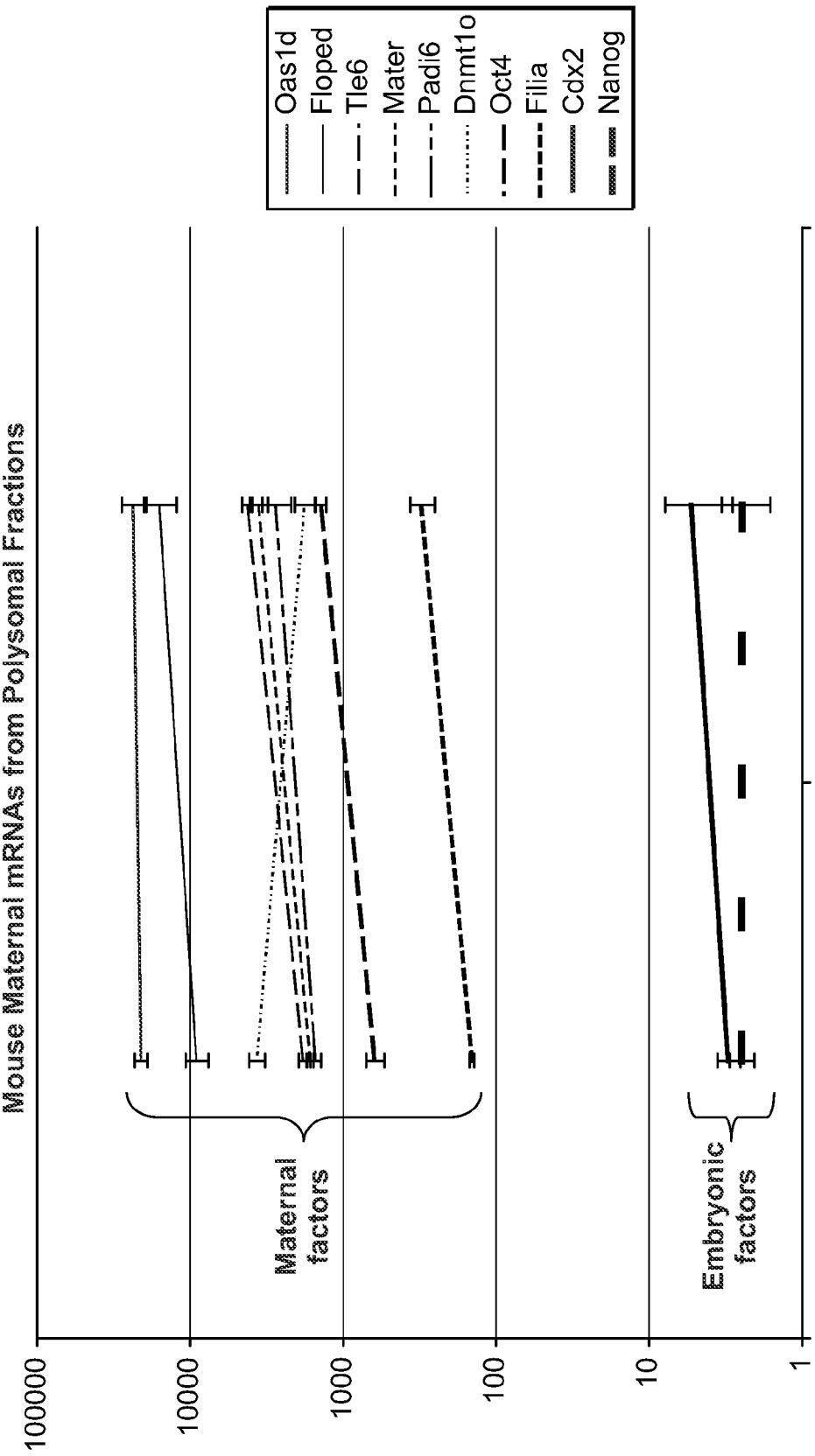

Mouse Maternal mRNAs from Polysomal Fractions
100000
10000
1000
100
10
1
Oas1d
Floped
Tle6
Mater
Padi6
Dnmt1o
Oct4
Filia
Cdx2
Nanog
Maternal factors
Embryonic factors
oocyte
1 cell embryo
Developmental Stage

FIG. 5

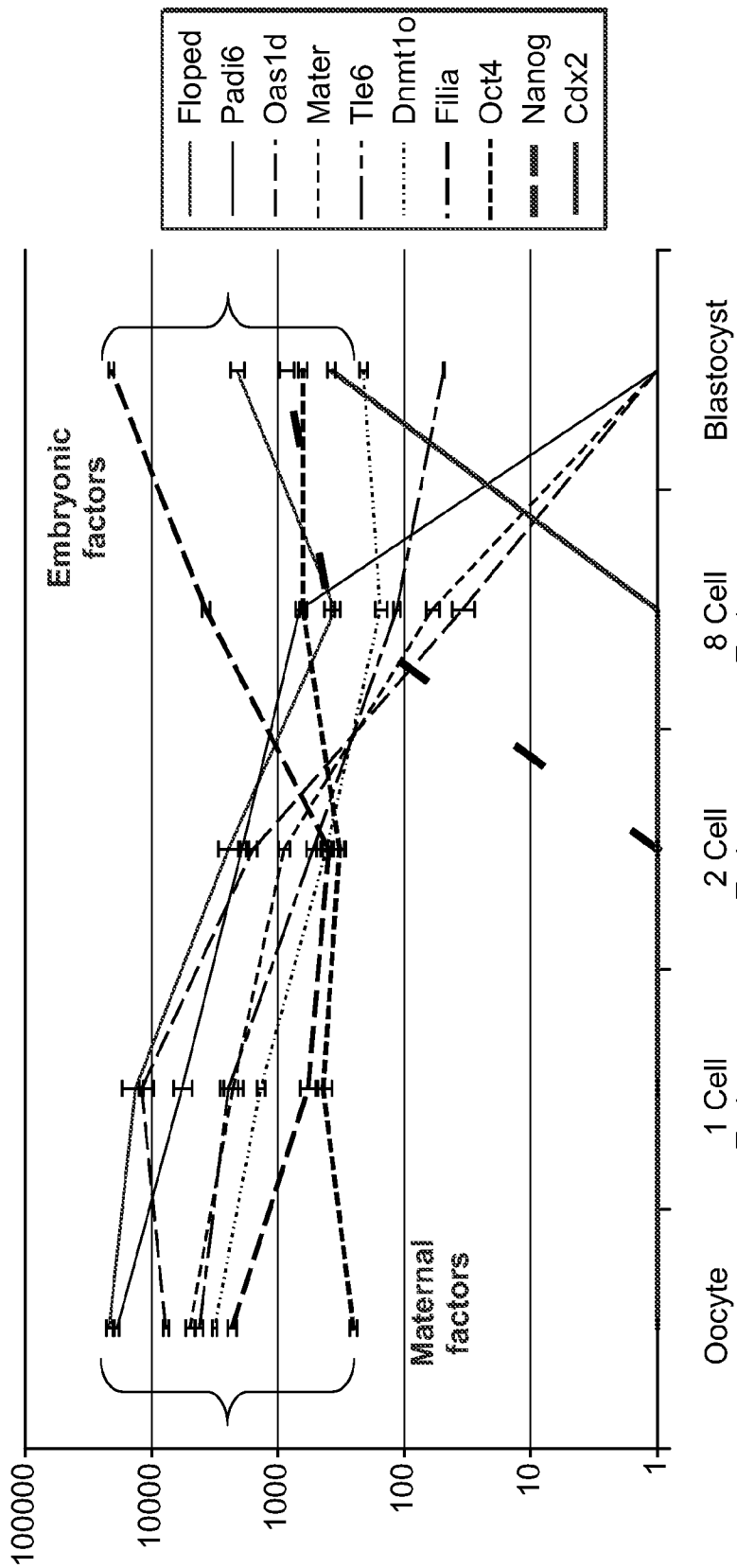

Gene Expression in Pre-implantation Mouse Development
Floped
Padi6
Oas1d
Mater
Tle6
Dnmt1o
Filia
Oct4
Nanog
Cdx2
Embryonic factors
Maternal factors
100000
10000
1000
100
10
1
Oocyte
1 Cell Embryo
2 Cell Embryo
8 Cell Embryo
Blastocyst
Stage

FIG. 6

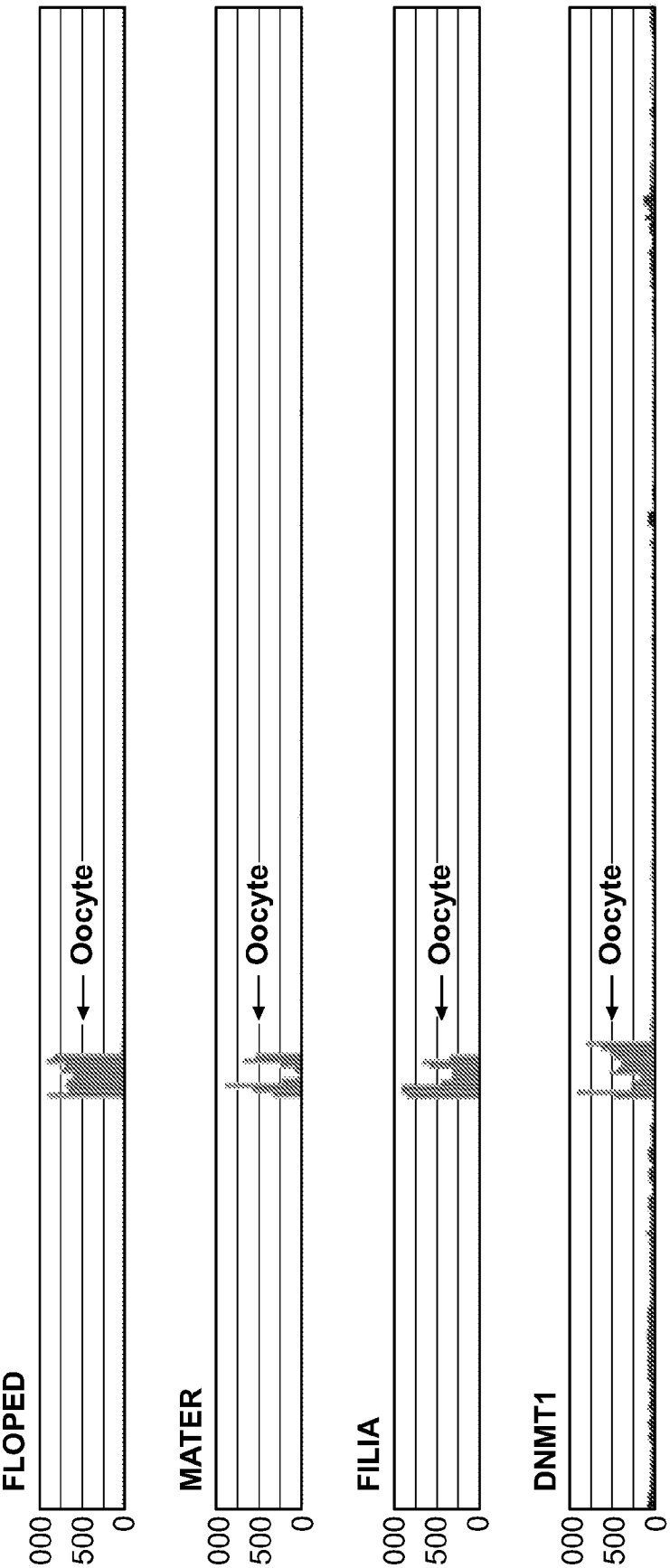

FLOPED
1000
500
0
Oocyte
MATER
1000
500
0
Oocyte
FILIA
1000
500
0
Oocyte
DNMT1
1000
500
0
Oocyte

FIG. 7

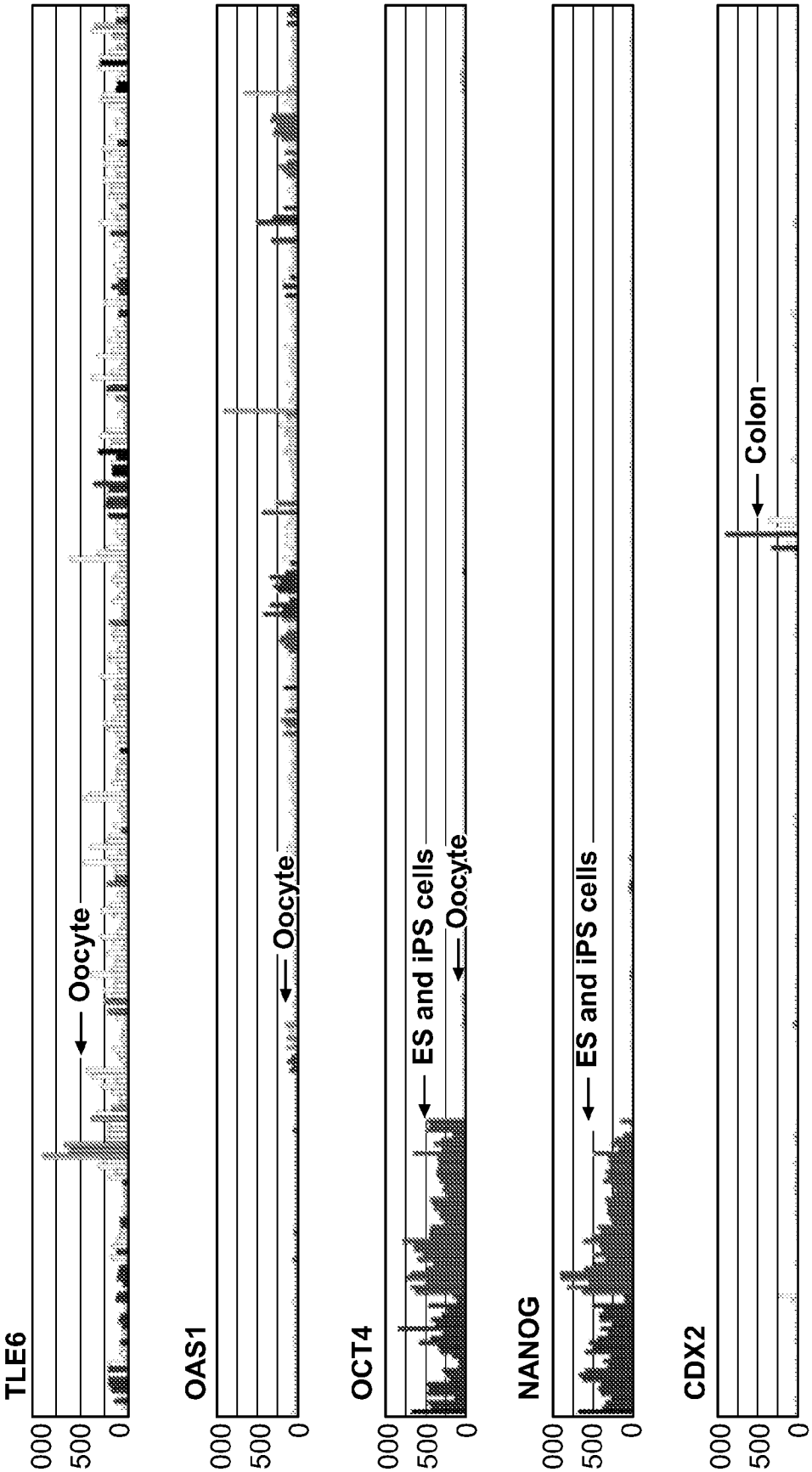



FIG. 7 (continued)