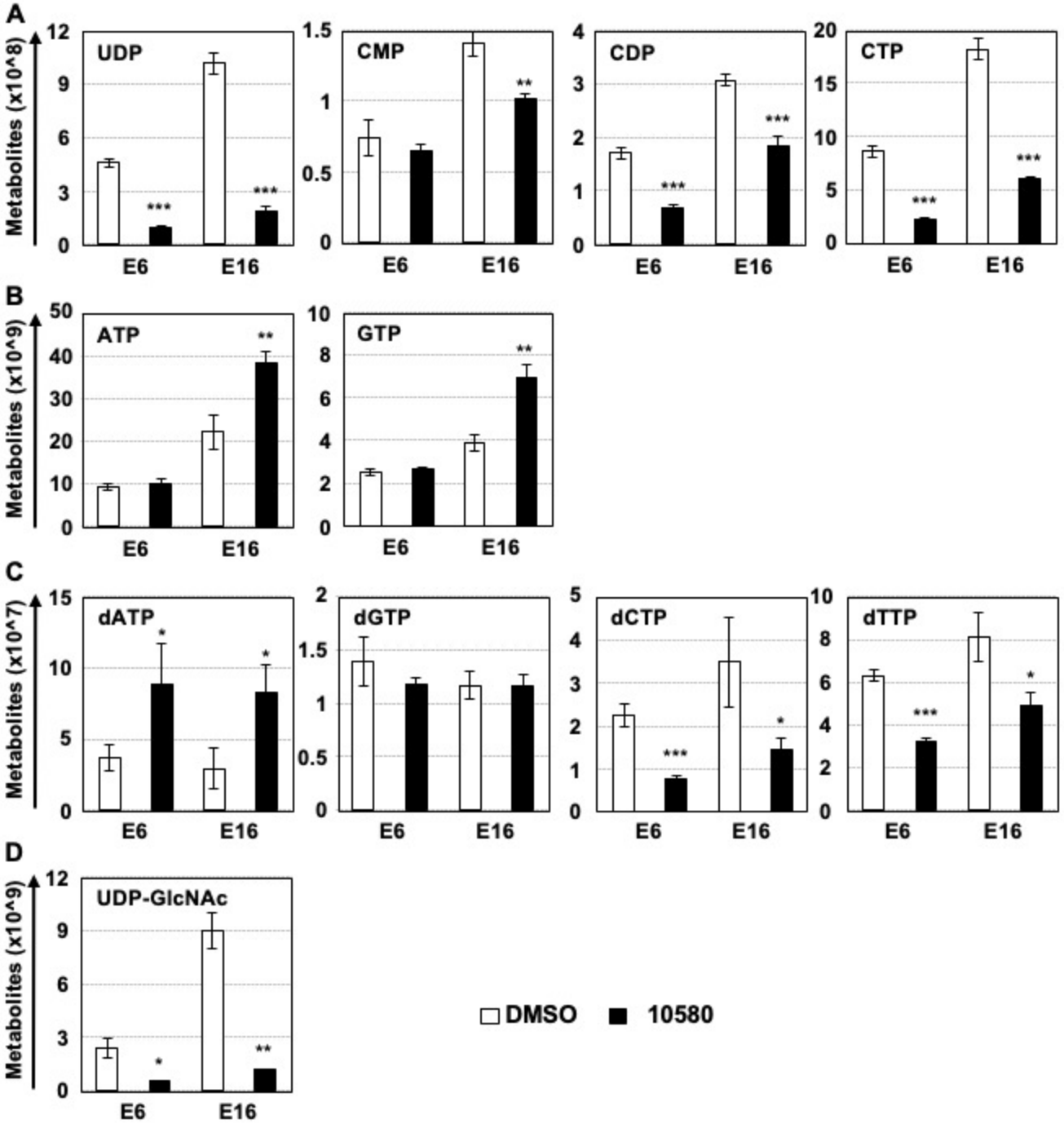
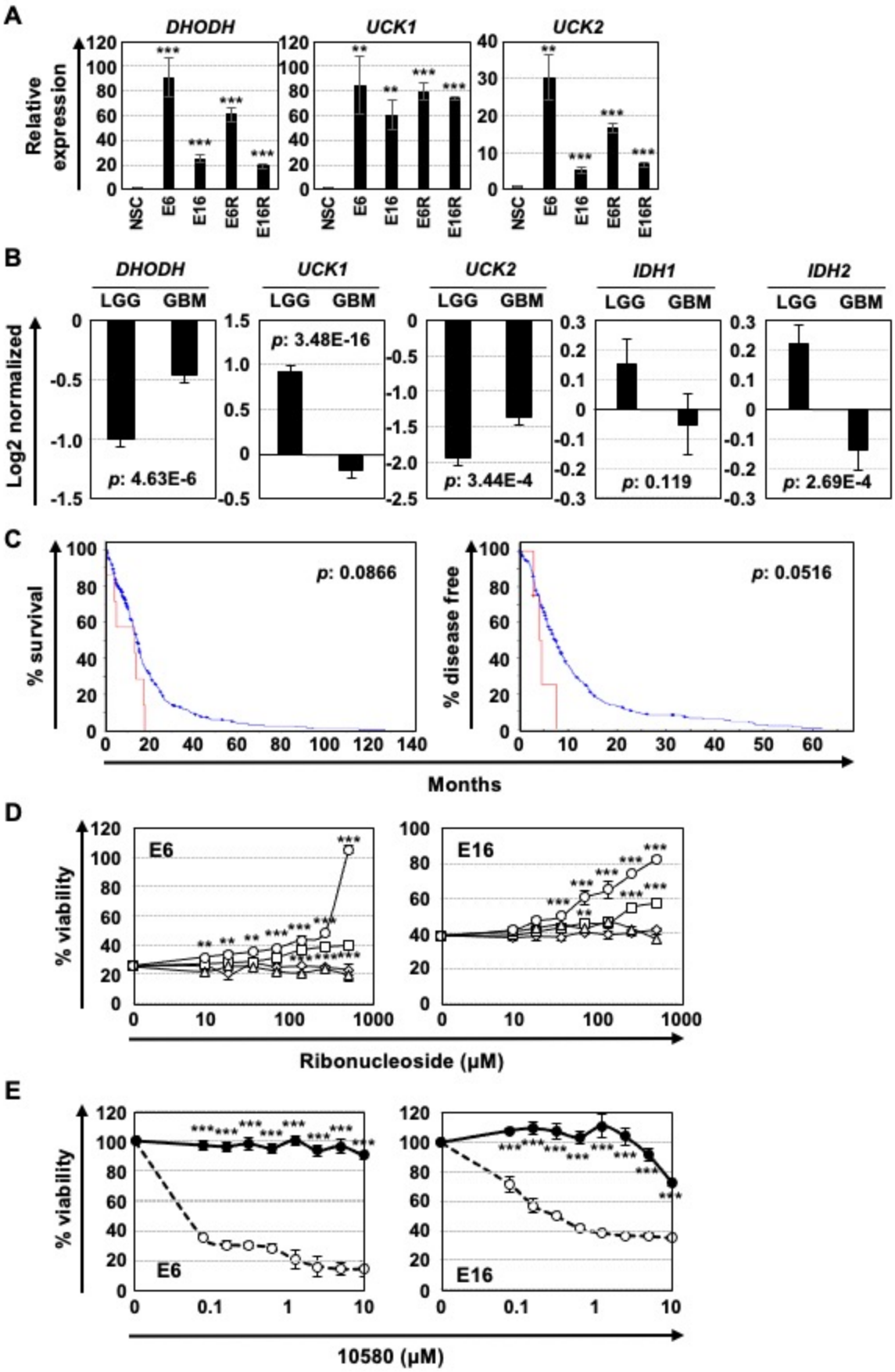
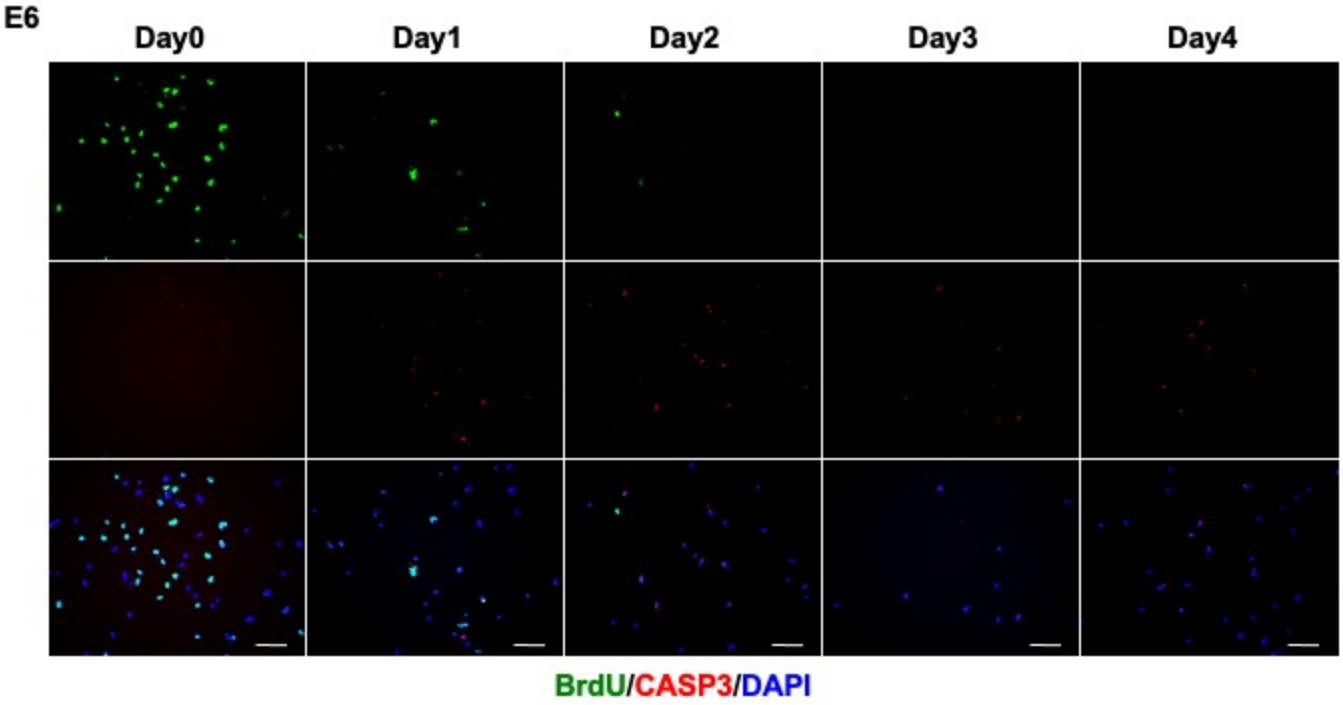
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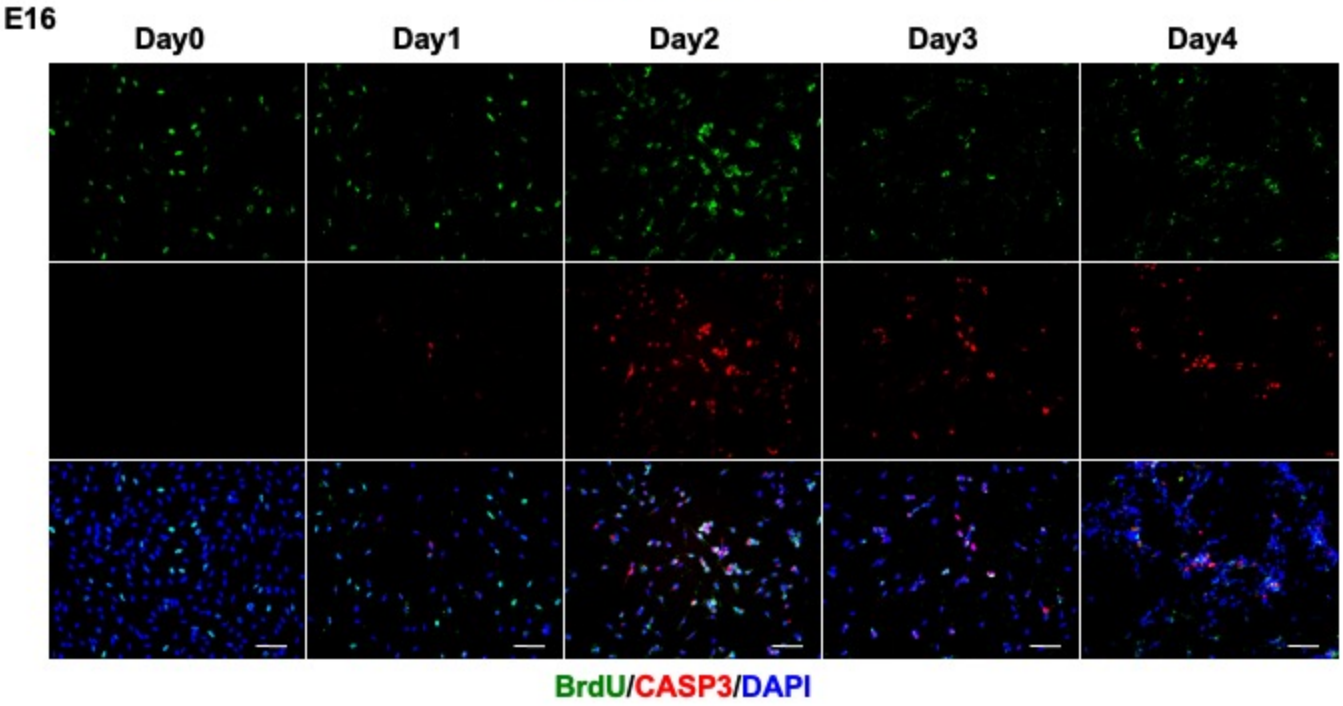
Title	Discovery of a new pyrimidine synthesis inhibitor eradicating glioblastoma-initiating cells
Author(s)	Echizenya, Smile; Ishii, Yukiko; Kitazawa, Satoshi et al.
Citation	Neuro-Oncology, 22(2), 229-239 https://doi.org/10.1093/neuonc/noz170
Issue Date	2020-02
Doc URL	https://hdl.handle.net/2115/80325
Rights	This is a pre-copyedited, author-produced version of an article accepted for publication in Neuro-Oncology following peer review. The version of record Smile Echizenya, Yukiko Ishii, Satoshi Kitazawa, Tadashi Tanaka, Shun Matsuda, Eriko Watanabe, Masao Umekawa, Shunsuke Terasaka, Kiyohiro Houkin, Tomohisa Hatta, Tohru Natsume, Yoshimasa Maeda, Shin-Ichi Watanabe, Shinji Hagiwara, Toru Kondo, Discovery of a new pyrimidine synthesis inhibitor eradicating glioblastoma-initiating cells, Neuro-Oncology, Volume 22, Issue 2, February 2020, Pages 229-239, is available online at: https://doi.org/10.1093/neuonc/noz170
Type	journal article
File Information	Echizenya, Ishii, et al-revised Supplementary figures.pdf

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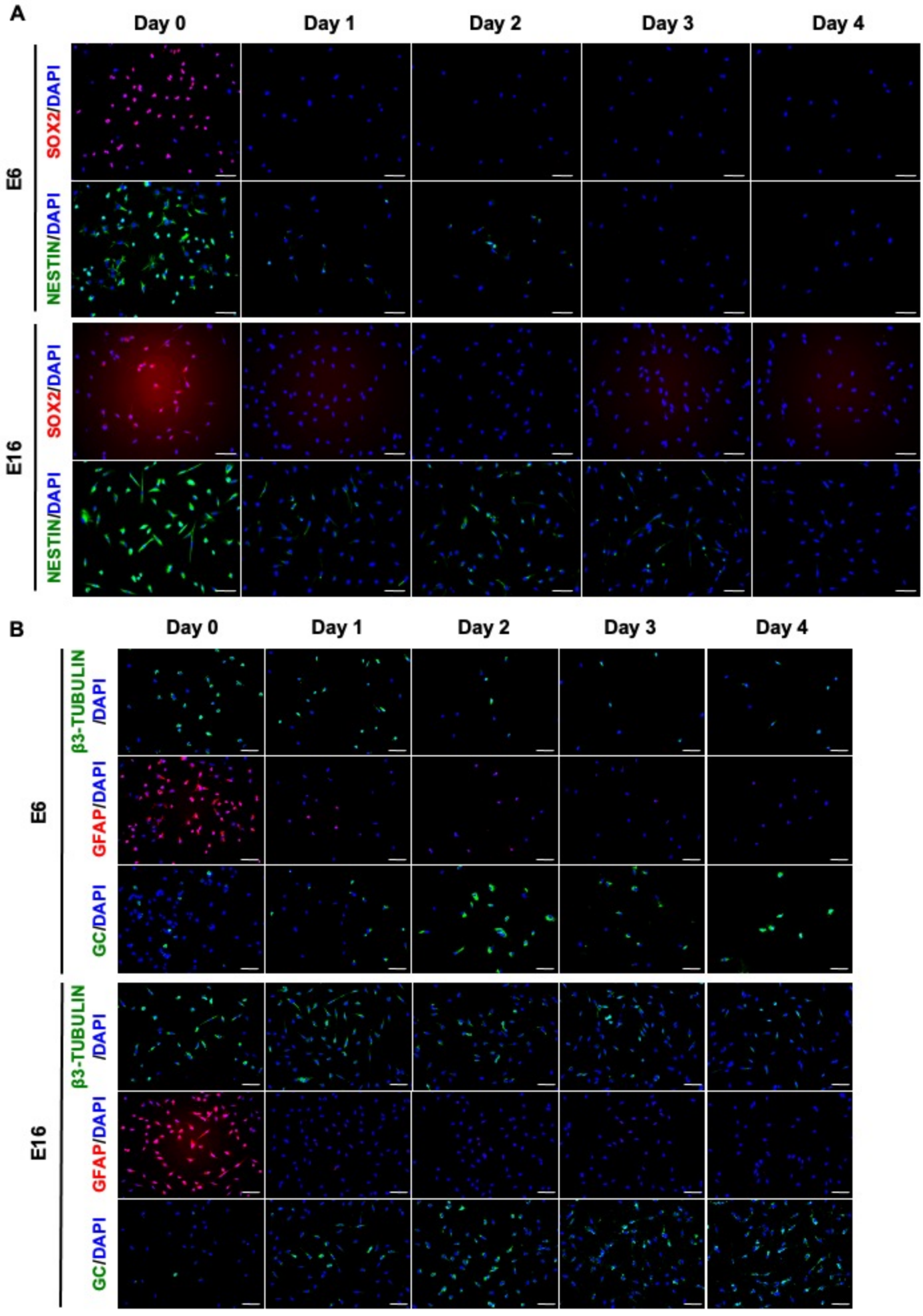

A
Metabolites (x10^8)
UDP
CMP
CDP
CTP
E6
E16
B
Metabolites (x10^9)
ATP
GTP
C
Metabolites (x10^7)
dATP
dGTP
dCTP
dTTP
D
Metabolites (x10^9)
UDP-GlcNAc
DMSO
10580

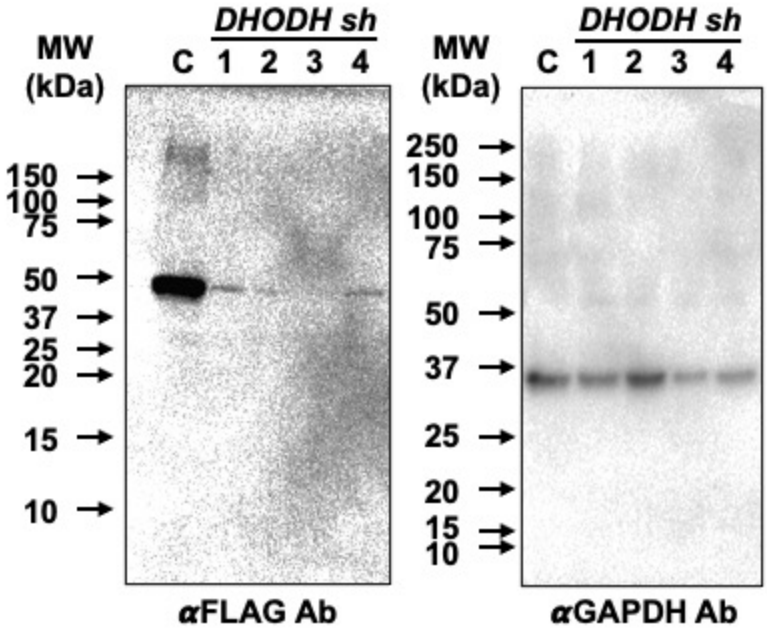

A
DHODH
UCK1
UCK2
Relative expression
NSC
E6
E16
E6R
E16R
B
DHODH
UCK1
UCK2
IDH1
IDH2
LGG
GBM
Log2 normalized
p: 4.63E-6
p: 3.48E-16
p: 3.44E-4
p: 0.119
p: 2.69E-4
C
% survival
p: 0.0866
% disease free
p: 0.0516
Months
D
E6
E16
% viability
Ribonucleoside (μM)
E
E6
E16
% viability
10580 (μM)

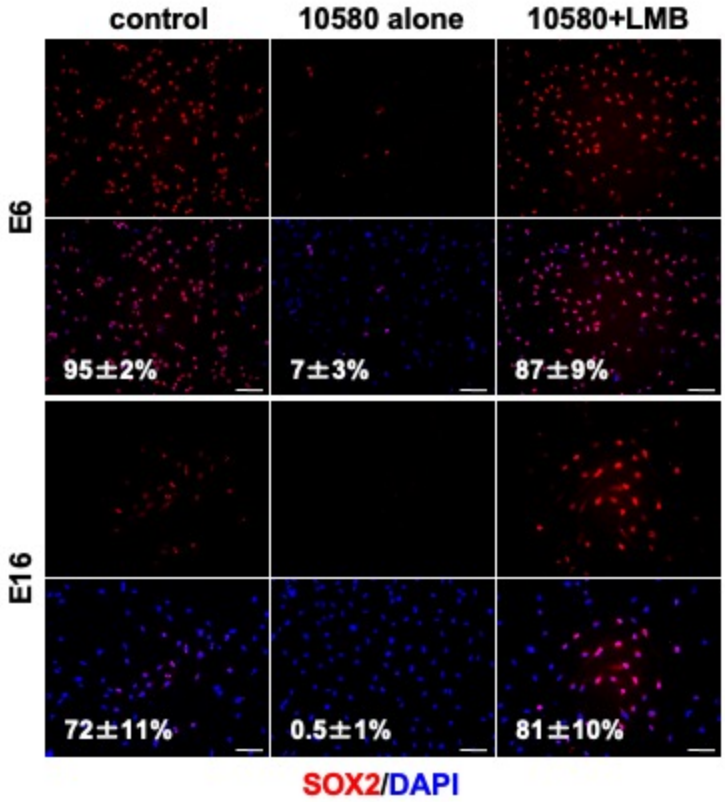

E6
Day0
Day1
Day2
Day3
Day4
BrdU/CASP3/DAPI

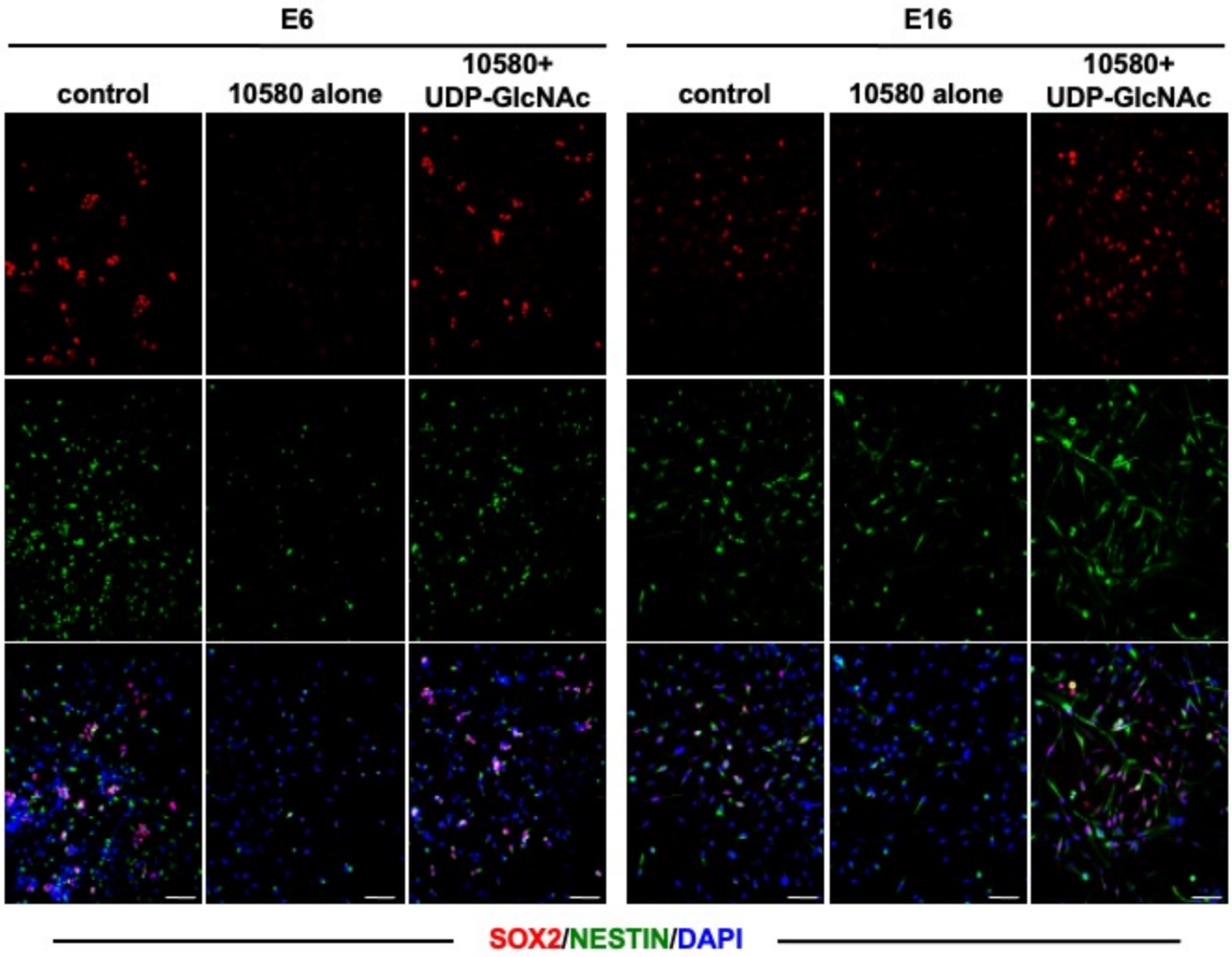

E16
Day0
Day1
Day2
Day3
Day4
BrdU/CASP3/DAPI

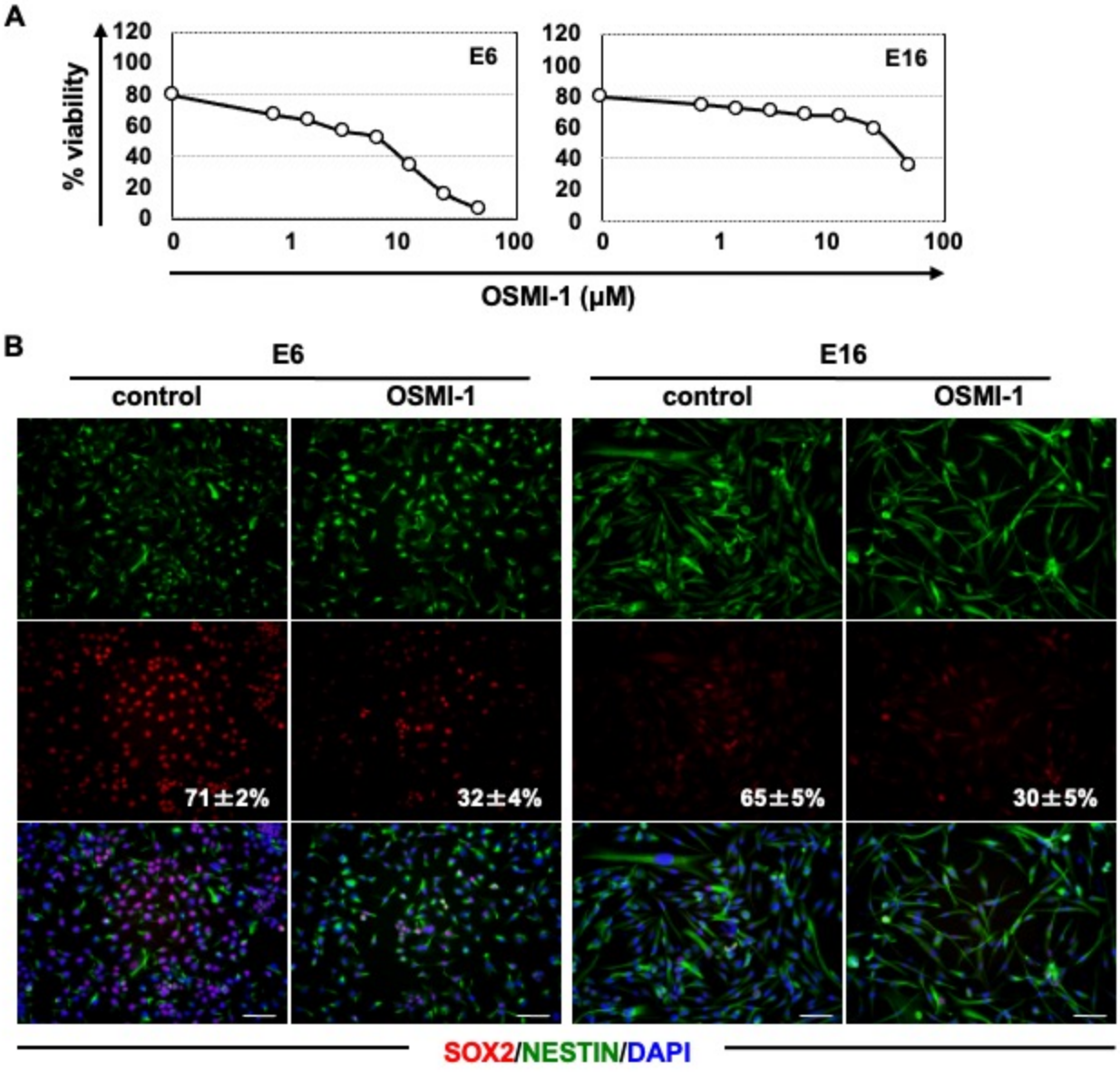
Echizenya, Ishii, et al, Supplementary Figure 4

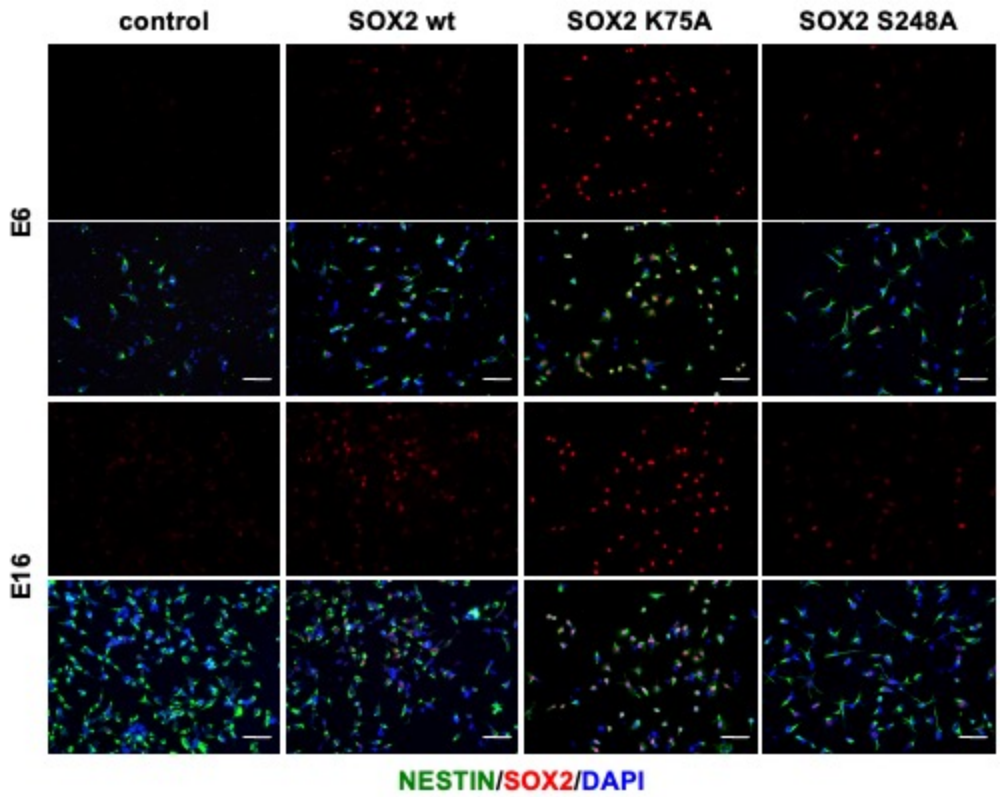



DHODH sh
MW (kDa)
C 1 2 3 4
150
100
75
50
37
25
20
15
10
αFLAG Ab
DHODH sh
MW (kDa)
C 1 2 3 4
250
150
100
75
50
37
25
20
15
10
αGAPDH Ab


control
10580 alone
10580+LMB
E6
E16
95±2%
7±3%
87±9%
72±11%
0.5±1%
81±10%
SOX2/DAPI


E6
E16
control
10580 alone
10580+
UDP-GlcNAc
control
10580 alone
10580+
UDP-GlcNAc
SOX2/NESTIN/DAPI


A
% viability
120
100
80
60
40
20
0
E6
E16
0
1
10
100
OSMI-1 (μM)
B
E6
E16
control
OSMI-1
control
OSMI-1
71±2%
32±4%
65±5%
30±5%
SOX2/NESTIN/DAPI


control
SOX2 wt
SOX2 K75A
SOX2 S248A
E6
E16
NESTIN/SOX2/DAPI