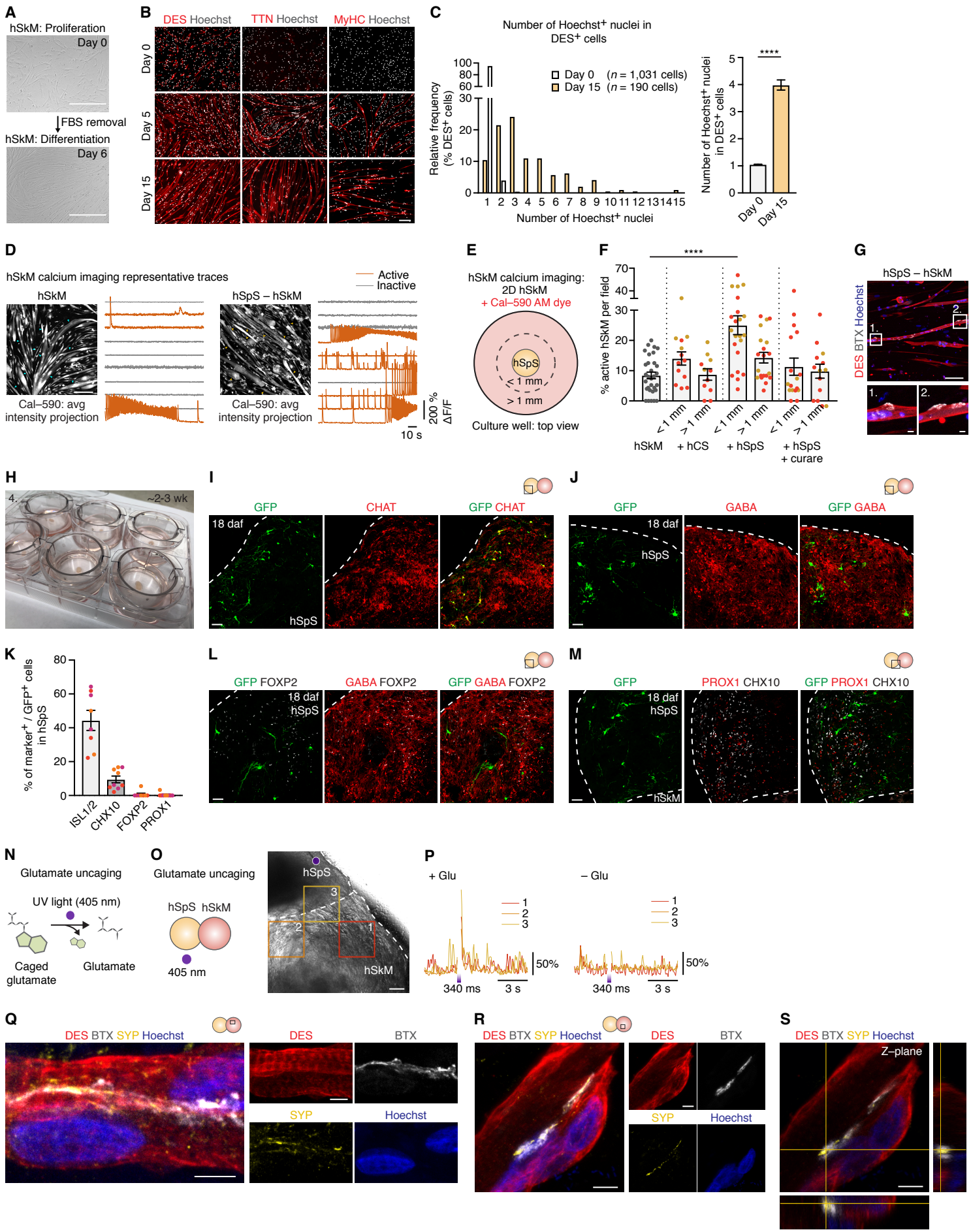
Figure S6


A
hSkM: Proliferation
Day 0
FBS removal
hSkM: Differentiation
Day 6
B
DES Hoechst
TTN Hoechst
MyHC Hoechst
Day 0
Day 5
Day 15
C
Number of Hoechst+ nuclei in DES+ cells
Day 0 (n = 1,031 cells)
Day 15 (n = 190 cells)
Relative frequency (% DES+ cells)
Number of Hoechst+ nuclei
Number of Hoechst+ nuclei in DES+ cells
****
Day 0
Day 15
D
hSkM calcium imaging representative traces
hSkM
hSpS – hSkM
Active
Inactive
Cal–590: avg intensity projection
Cal–590: avg intensity projection
200 % ΔF/F
10 s
E
hSkM calcium imaging: 2D hSkM
+ Cal–590 AM dye
hSpS
< 1 mm
> 1 mm
Culture well: top view
F
****
% active hSkM per field
< 1 mm
> 1 mm
hSkM
+ hCS
+ hSpS
+ hSpS + curare
G
hSpS – hSkM
DES BTX Hoechst
1.
2.
H
4.
~2-3 wk
I
GFP
CHAT
GFP CHAT
18 daf
hSpS
J
GFP
GABA
GFP GABA
18 daf
hSpS
K
% of marker+ / GFP+ cells in hSpS
ISL1/2
CHX10
FOXP2
PROX1
L
GFP FOXP2
GABA FOXP2
GFP GABA FOXP2
18 daf
hSpS
M
GFP
PROX1 CHX10
GFP PROX1 CHX10
18 daf
hSpS
hSkM
N
Glutamate uncaging
UV light (405 nm)
Caged glutamate
Glutamate
O
Glutamate uncaging
hSpS hSkM
405 nm
hSpS
hSkM
P
+ Glu
– Glu
50%
340 ms
3 s
Q
DES BTX SYP Hoechst
DES
BTX
SYP
Hoechst
R
DES BTX SYP Hoechst
DES
BTX
SYP
Hoechst
S
DES BTX SYP Hoechst
Z–plane