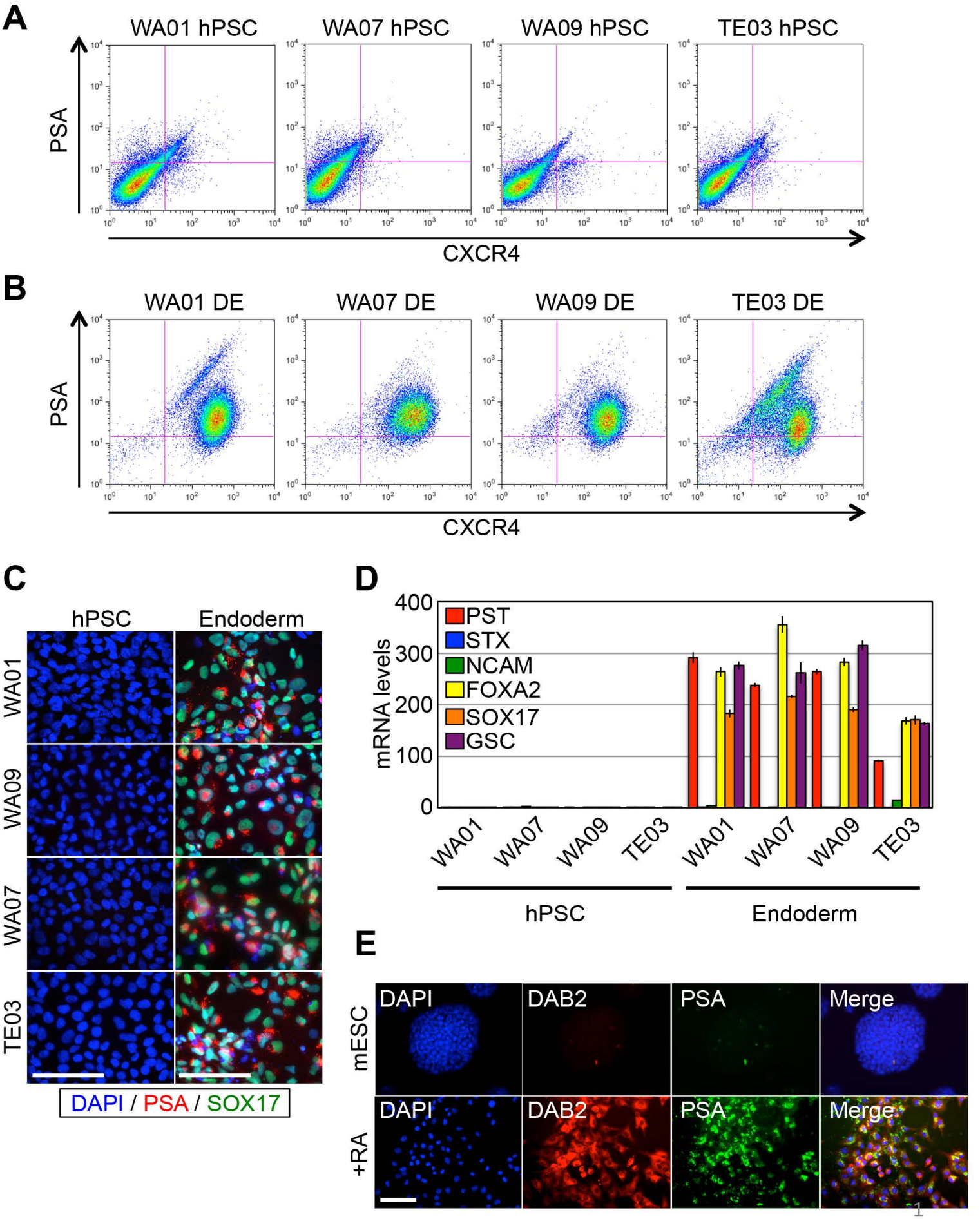
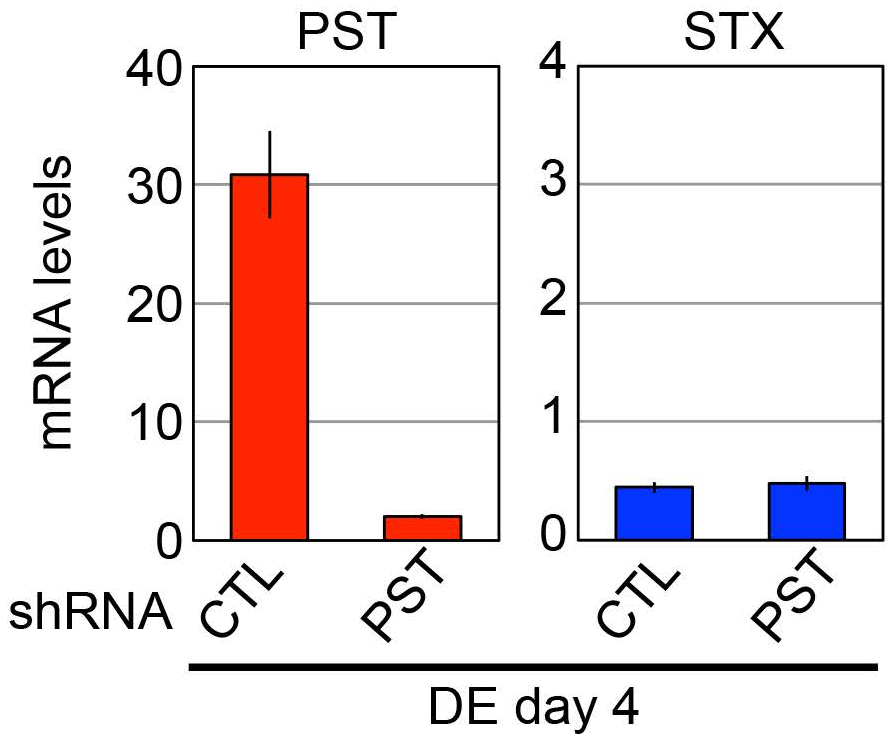
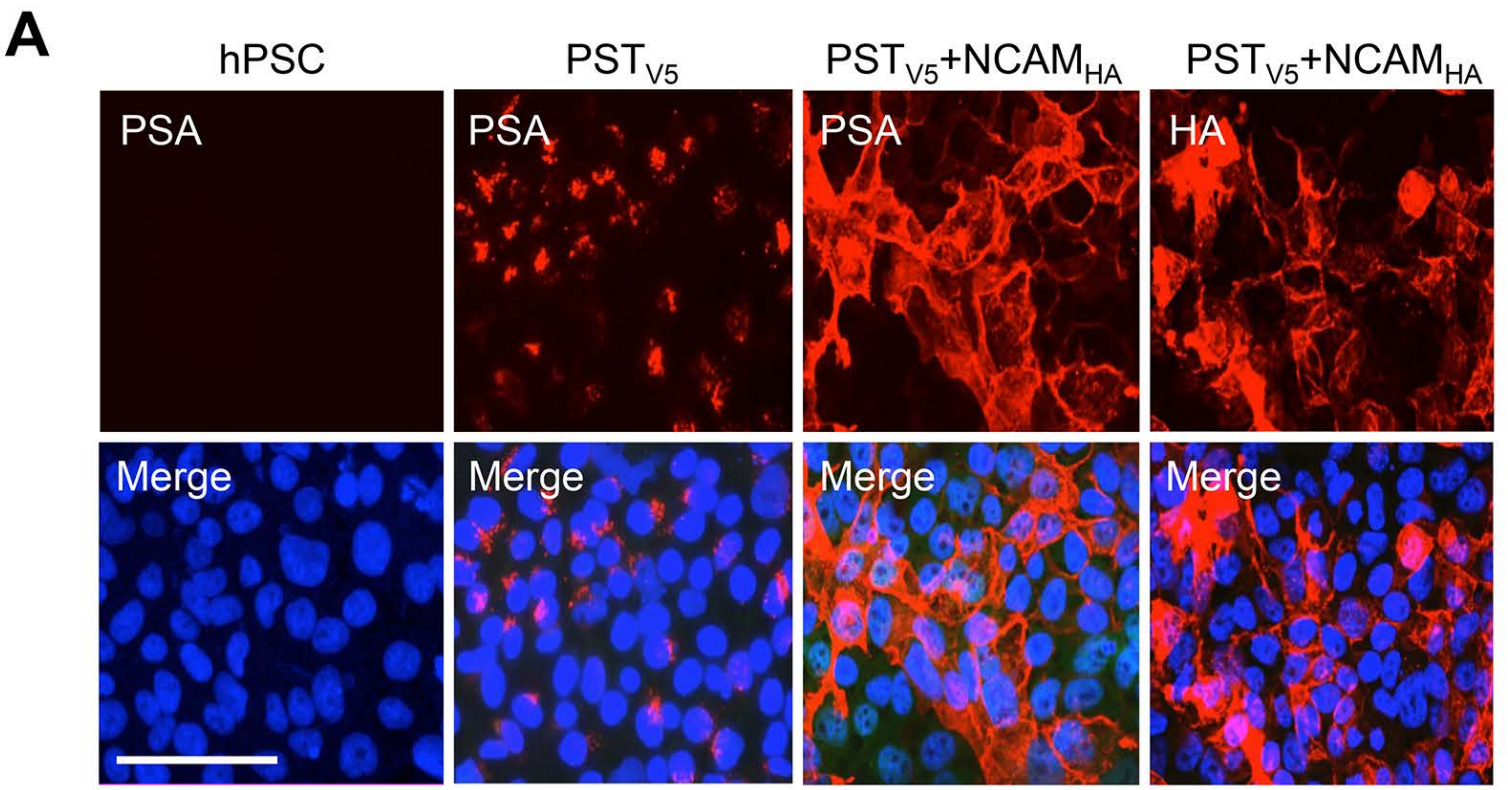
Supplemental Figure 1

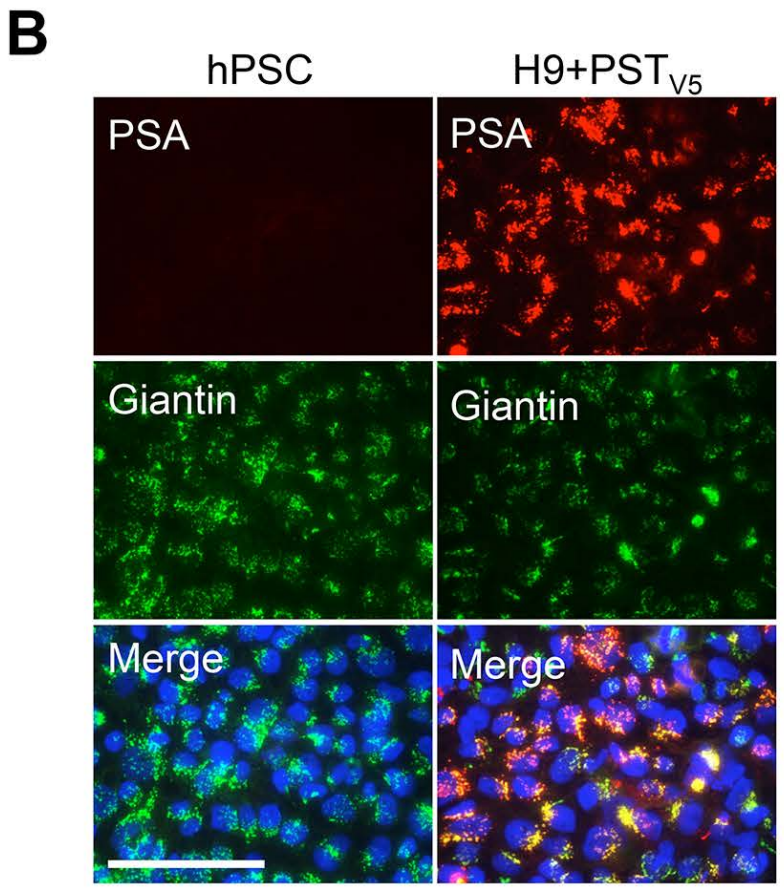


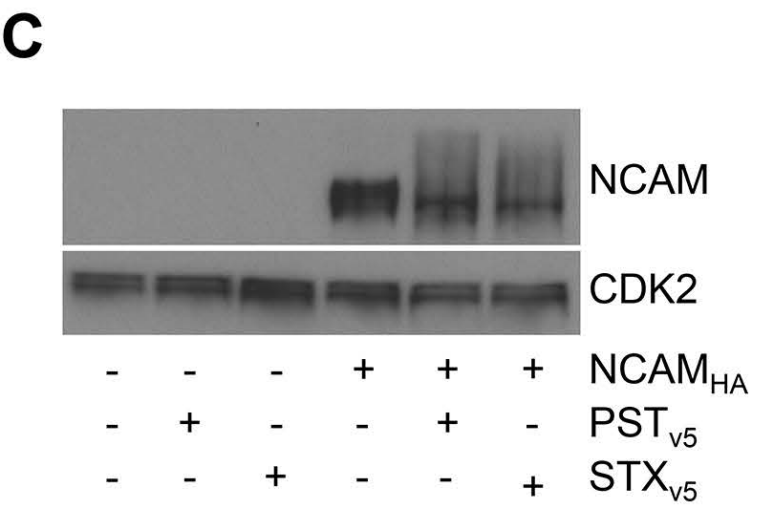
Supplemental Figure 2



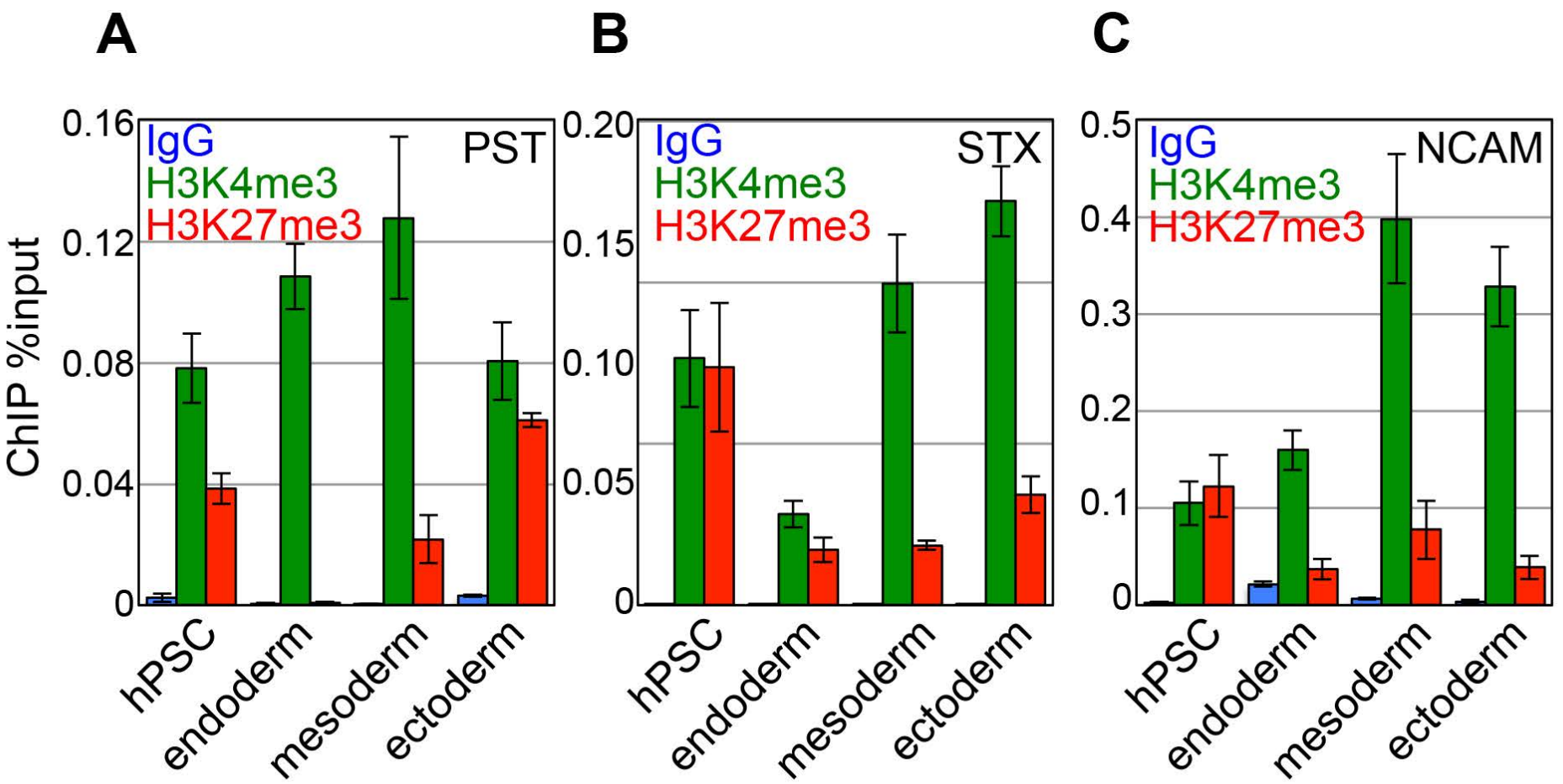
Supplemental Figure 3



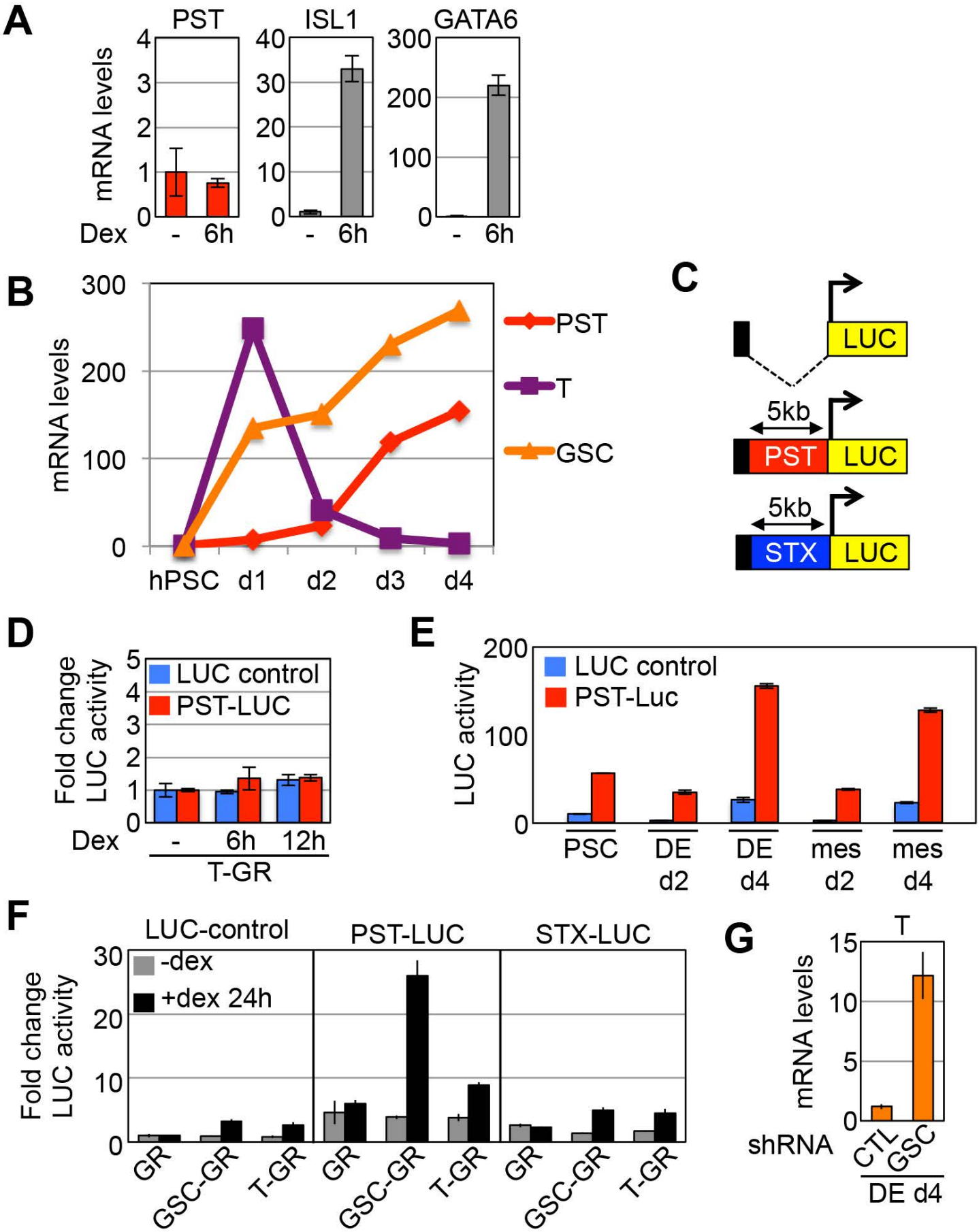




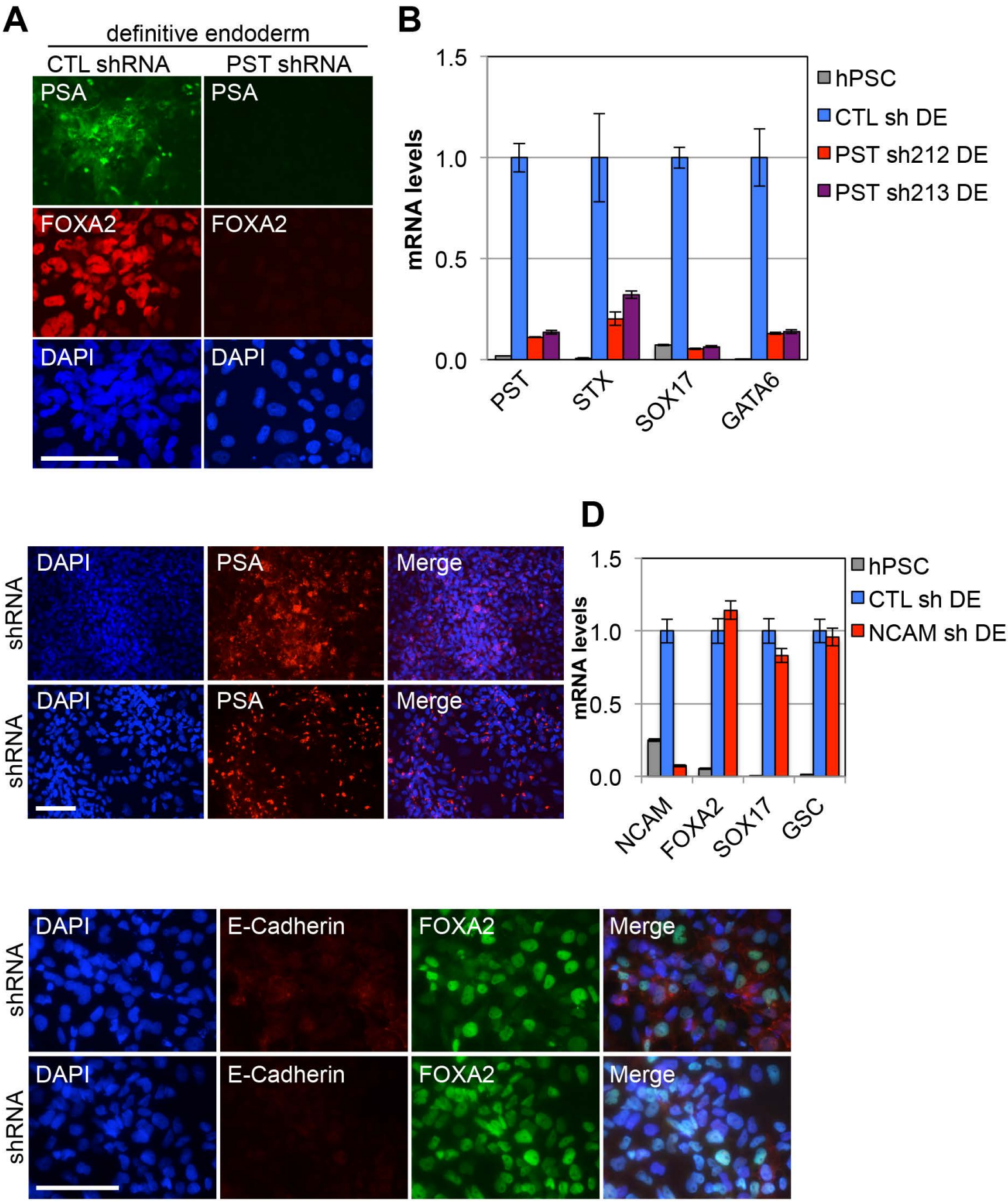
Supplemental Figure 4



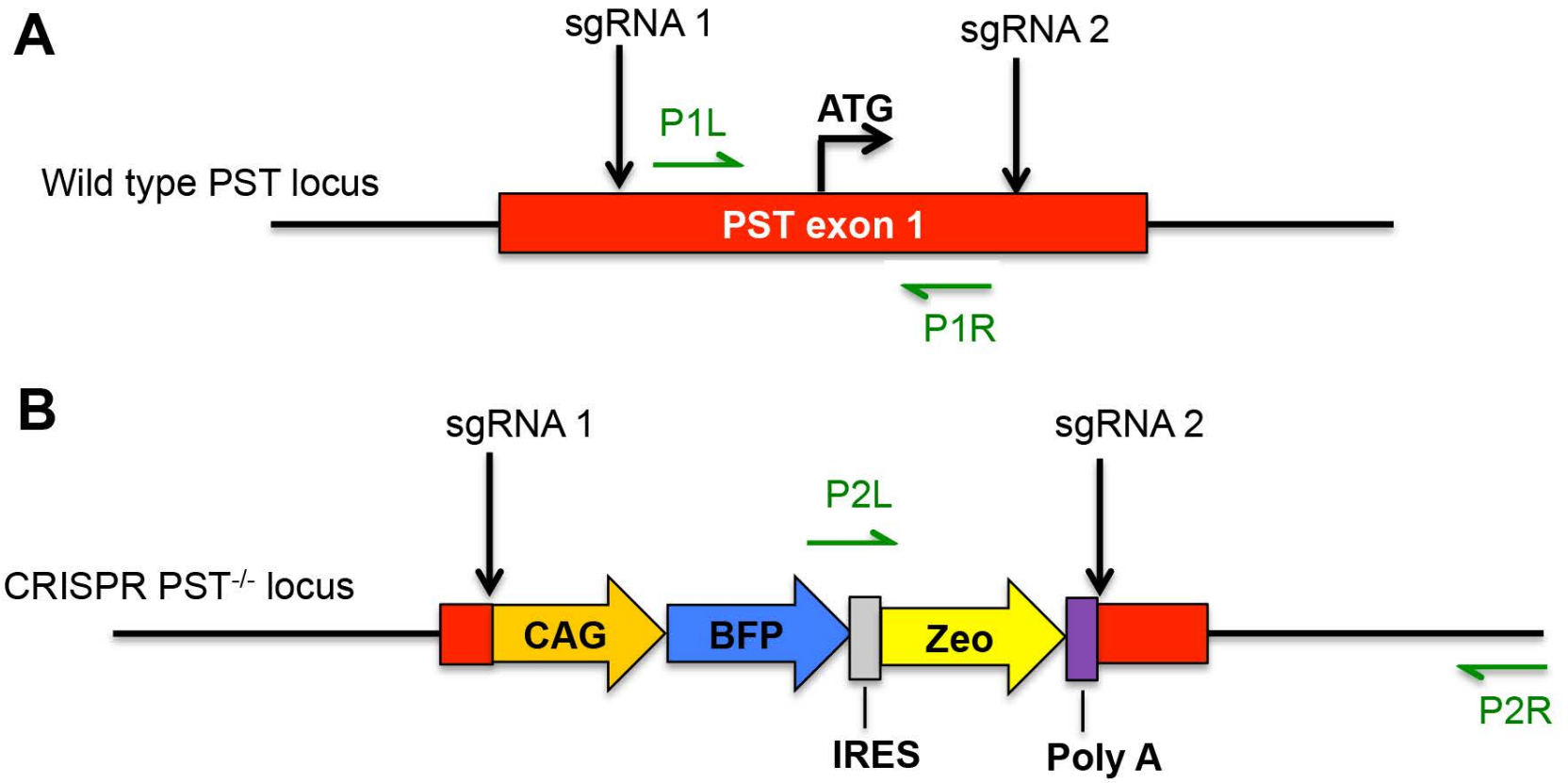
Supplemental Figure 5

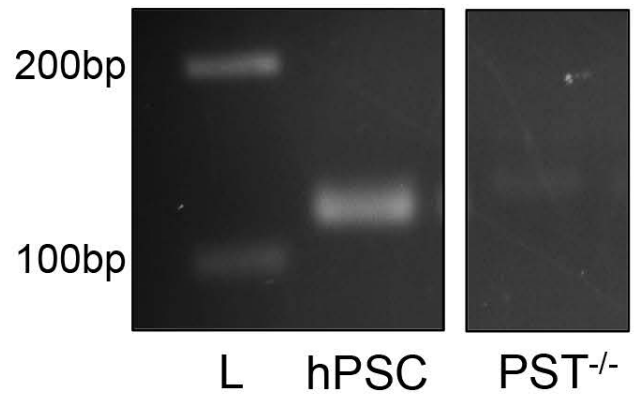


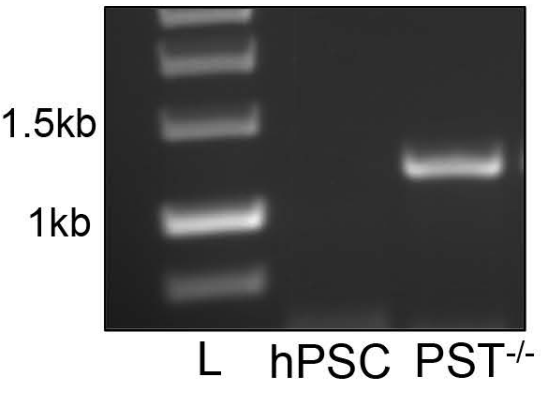
Supplemental Figure 6



Supplemental Figure 7







E

Wild type PST locus PCR

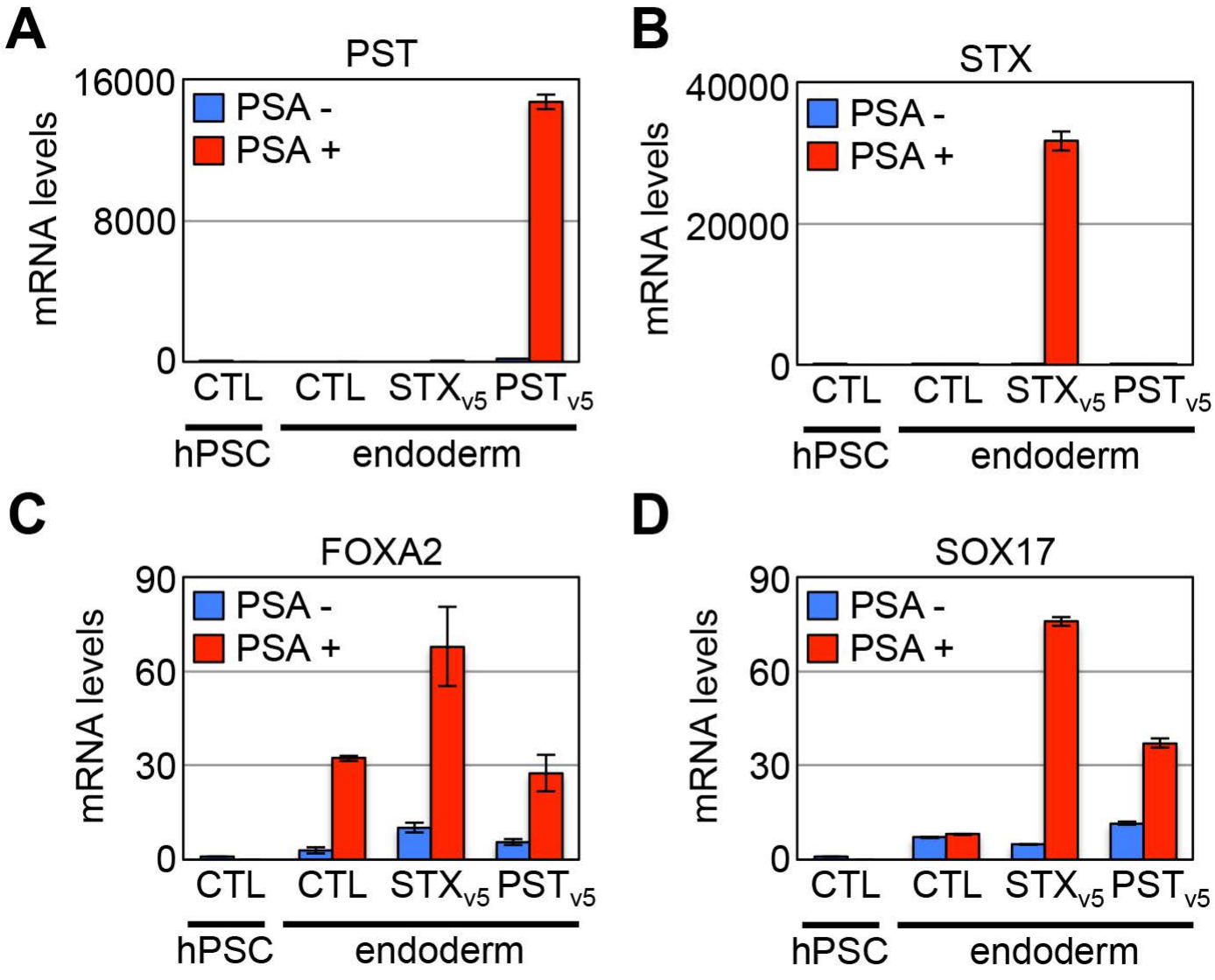
Primer set	hPSC (bp)	PST$^{-/-}$ (bp)
P1L P1R	119	0

F

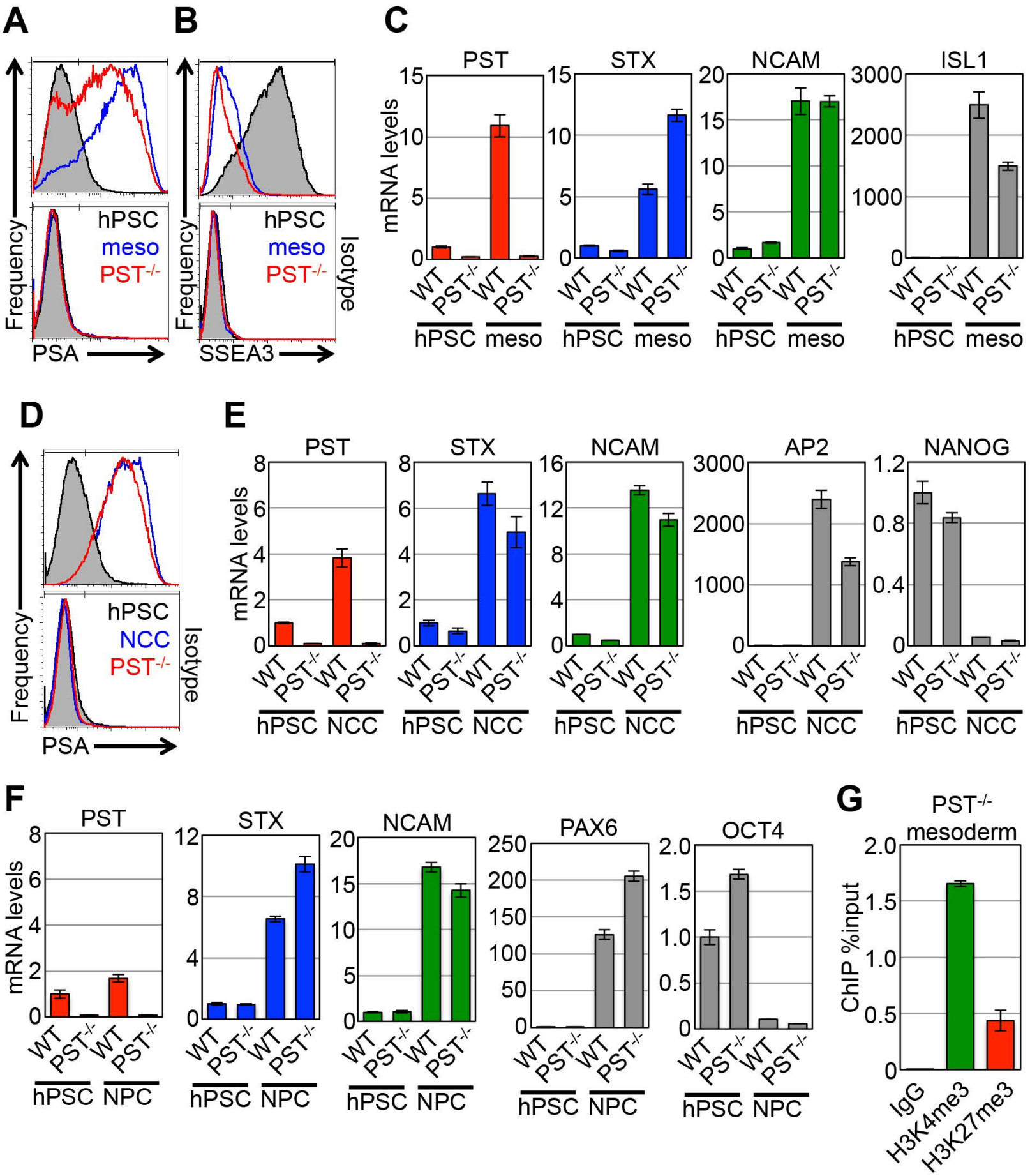
CRISPR PST locus PCR

Primer set	hPSC (bp)	PST$^{-/-}$ (bp)
P2L P2R	0	1269

Supplemental Figure 8



Supplemental Figure 9



Supplemental Figure 10

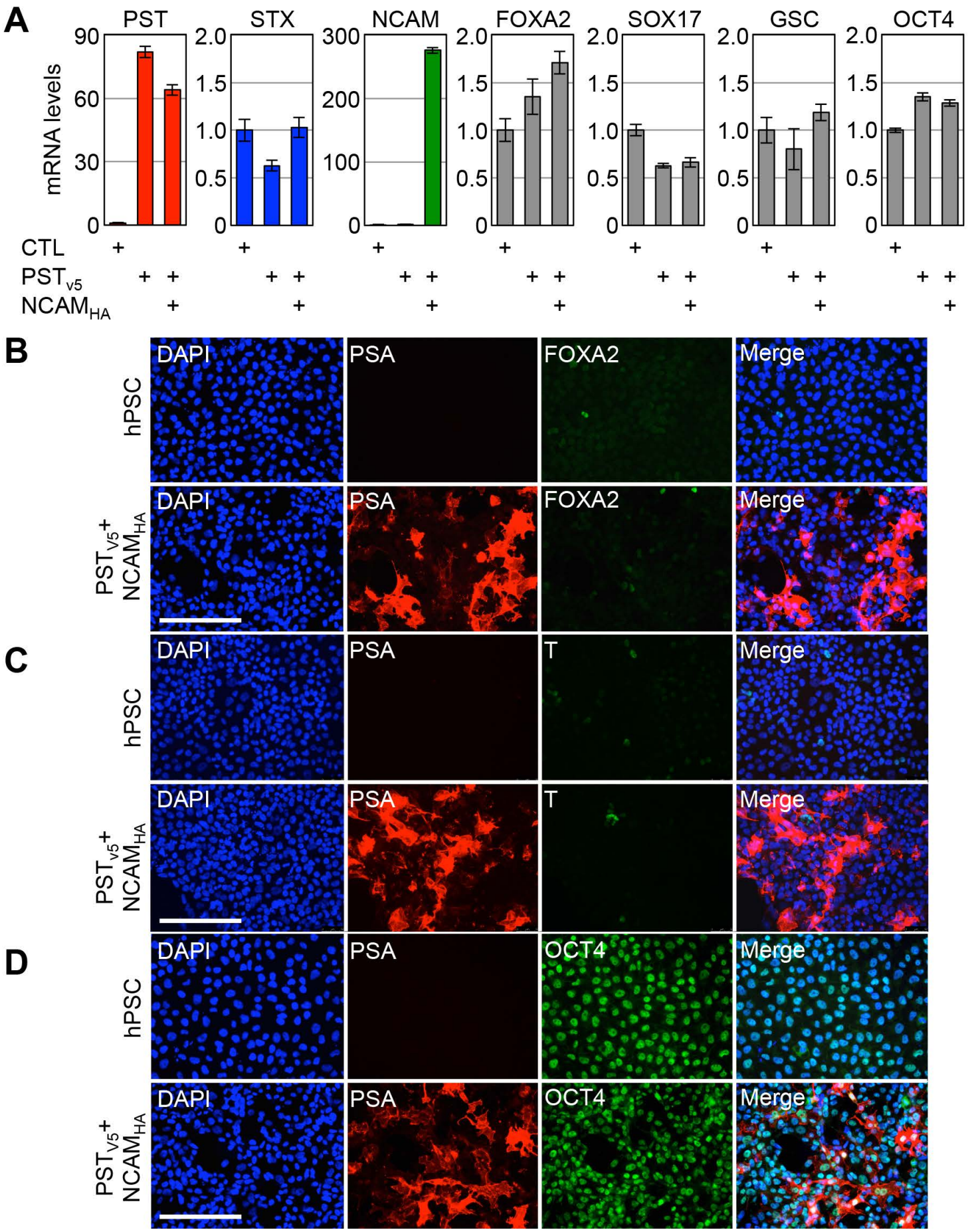


Table S1 – Antibody information

Antibody	Source	Catalog no.	Uses*	Dilution (IB)	Dilution (FC)	Dilution (IHC)
PSA		mAb 735	IB, IHC, FC	1:1000	1:100	1:250
SOX17	R&D Systems	AF1924	IB, IHC	1:1000	-	1:100
T	R&D Systems	AF2085	IHC	-	-	1:100
NANOG	Genetex	GTX100863	IHC	-	-	1:100
Giantin	abcam	ab24586	IHC	-	-	1:100
α-Mannosidase II	abcam	ab12277	IHC	-	-	1:100
CDK2	Santa Cruz	SC-163	IB	1:2000	-	-
NCAM	Santa Cruz	123A8	IB, IHC, FC	1:500	1:50	1:50
SNAI1	R&D Systems	AF3639	IHC	-	-	1:100
FOXA2	Millipore	07-633	IB, IHC	1:1000	-	1:100
CXCR4	eBioscience	17-9999	FC	-	1X	-
SSEA3	eBioscience	53-8833	FC	-	1X	-
V5	Invitrogen	46-0705	IHC	-	-	1:100
HA	Sigma	H3663-200UL	IHC	-	-	1:100
GSC	R&D Systems	AF4086	ChIP	-	-	-
H3K4me3	Abcam	Ab8580	ChIP	-	-	-
H3K27me3	Abcam	Ab6002	ChIP	-	-	-
IgG	Abcam	Ab46540	ChIP	-	-	-
E-Cadherin	R&D Systems	AF648	IHC	-	-	1:100

**Uses key: IB – Immunoblot, IHC – Immunohistochemistry, FC – Flow cytometry, ChIP – chromatin immunoprecipitation*