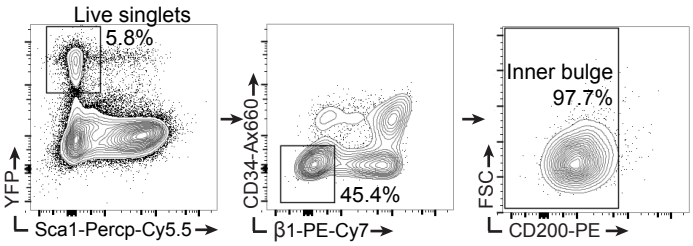
Figure supplement 6

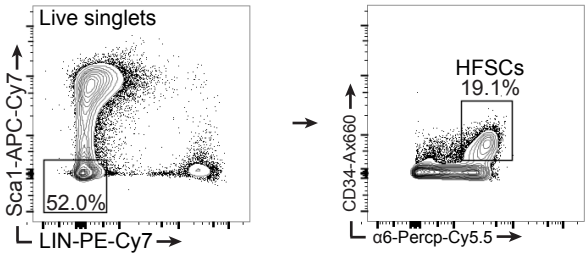
A

FACS Purification of Inner Bulge from *Sox9CreER; R26-YFP; Cdh1* Het & cKO

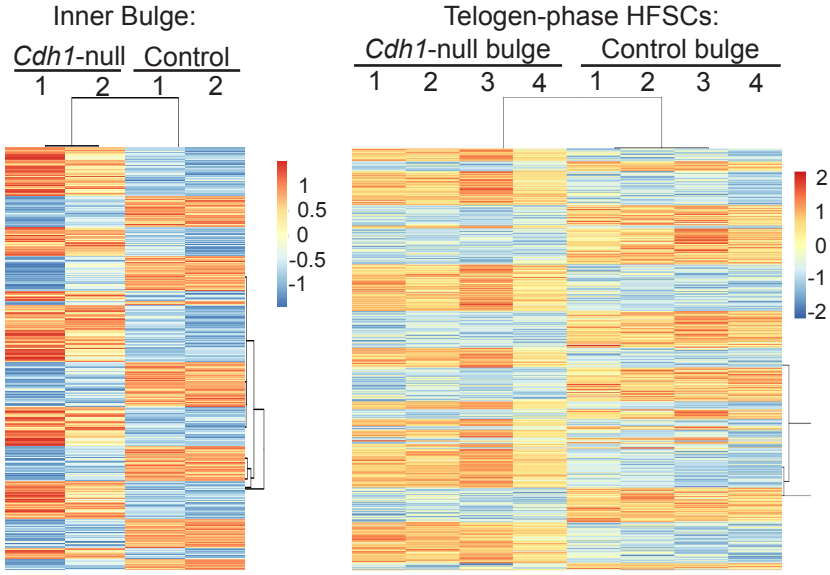


B

FACS Purification of WT Anagen-II/III HFSCs



C



D

KEGG Pathway Analysis of Genes Downregulated in Inner Bulge from *Cdh1*-null vs Control

KEGG pathway (downregulated)	P-value
Biosynthesis of antibiotics	2.5E-7
Primary immunodeficiency	2.0E-5
Purine metabolism	3.5E-5
Metabolic pathways	3.6E-5
Biosynthesis of amino acids	2.8E-4
Carbon metabolism	3.6E-4
Hematopoietic cell lineage	5.5E-4
Glycolysis/Gluconeogenesis	9.9E-4
Valine, leucine and isoleucine degradation	0.0010
HTLV-1 infection	0.0014

E

GO-BP Term Analysis of Genes Upregulated in HFSCs from *Cdh1*-null vs Control Bulge

GO-term	P-value
Cell cycle	1.0E-38
Cell division	9.6E-33
Mitotic nuclear division	5.4E-32
Immune system process	4.4E-20
DNA replication	3.9E-17
Chromosome segregation	3.6E-16
Mitotic sister chromatid segregation	1.3E-11
Cellular response to DNA damage	2.6E-11
DNA replication initiation	2.7E-11
Defense response to virus	5.1E-10
Microtubule-based movement	7.0E-8
DNA repair	2.0E-7
Immune response	2.3E-7
Innate immune response	3.5E-7
Mitotic spindle organization	7.5E-7

F

KEGG Pathway Analysis of Genes Downregulated in HFSCs from *Cdh1*-null vs Control Bulge

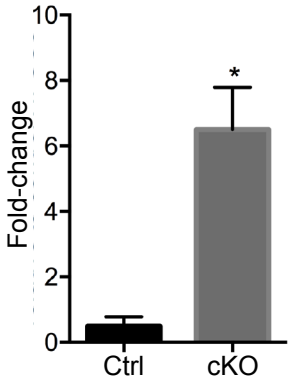
KEGG pathway (downregulated)	P-value
Neuroactive ligand-receptor interaction	0.0044
Metabolism of xenobiotics by CYP450	0.0047
TGFb signaling pathway	0.0048
Glutamatergic synapse	0.0073
Ras signaling pathway	0.0108
Vascular smooth muscle contraction	0.0129
Drug metabolism - CYP450	0.0228
Rap1 signaling pathway	0.0383
Glutathione metabolism	0.0458

G

KEGG Pathway Analysis of Differentially Expressed Genes in Anagen-II/III HFSCs vs Telogen HFSCs

KEGG pathway (upregulated, 23 total)	P-value
Cell cycle	9.2E-27
DNA replication	6.5E-13
p53 signaling pathway	9.2E-8
Fanconi anemia pathway	4.5E-7
Progeterone-mediated oocyte maturation	8.0E-5
Base excision repair	9.3E-5
Small cell lung cancer	2.0E-4
HTLV-1 infection	8.0E-4
Viral carcinogenesis	0.0011
Oocyte meiosis	0.0011

KEGG pathway (downregulated, 76 total)	P-value
1. HTLV-1 infection	1.4E-8
4. Antigen processing and presentation	1.3E-6
5. Osteoclast differentiation	1.9E-6
9. TNF signaling pathway	4.5E-5
19. Cytokine-cytokine receptor interaction	0.0011
20. Herpes simplex infection	0.0011
36. Hepatitis B	0.0064

H

Ccl2 Expression In HFSCs In Vitro