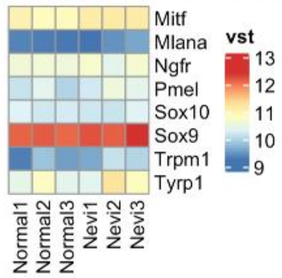
Figure S4

A

Dct-Cre *Nras*$^{Q61R/+}$

Nevi

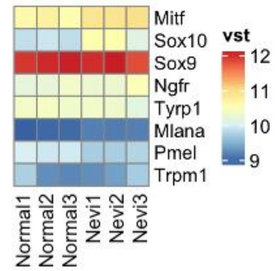
Expression Level of selected genes



Tyr-CreER^{T2}*Nras*$^{Q61R/Q61R}$

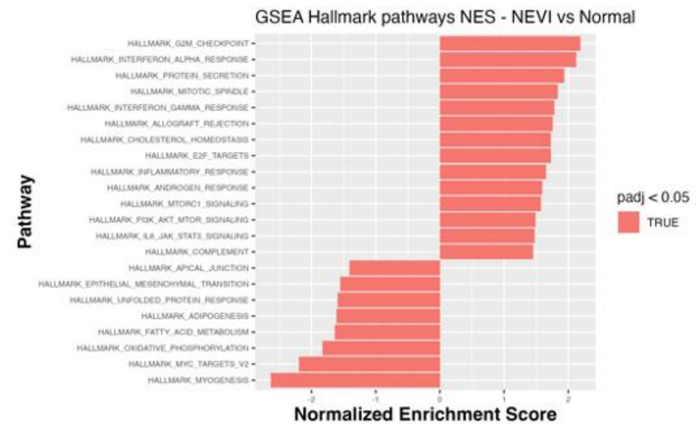
Nevi

Expression Level of selected genes

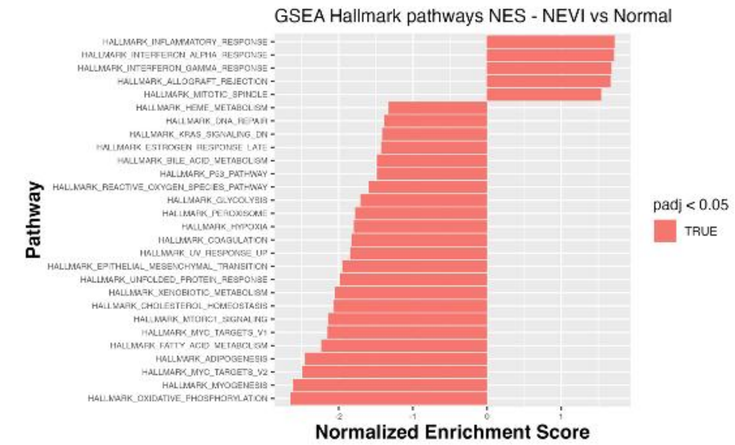


C

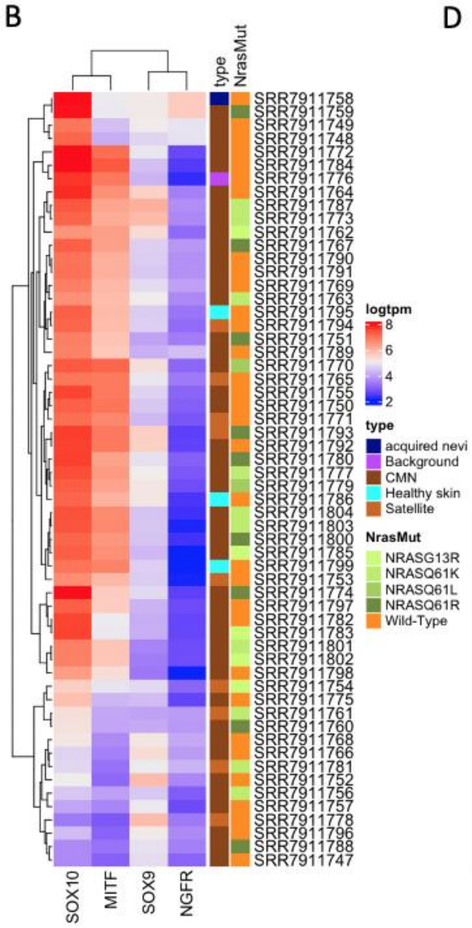
Dct-Cre *Nras*$^{Q61R/+}$



Tyr-CreER^{T2}*Nras*$^{Q61R/Q61R}$



B



D

Dct-Cre *Nras*$^{Q61R/+}$

Transcription Factor	rank	1st Sample p-value
POLR2B	1	5.69E-17
RAG2	2	2.45E-15
FLI1	3	2.31E-14
GFI1	4	4.33E-14
CTCF	5	1.30E-13
RARA	6	1.40E-13
STAT3	7	7.03E-13
RUNX1	8	7.48E-13
NR3C1	9	9.89E-13
RXRA	10	1.10E-12

Transcription Factor	rank	1st Sample p-value
IRF4	11	4.05E-12
NIPBL	12	1.36E-11
PR	13	5.66E-11
SMAD2/3	14	6.01E-11
GTF2B	15	9.41E-11
STAT1	16	9.97E-11
RELA	17	1.16E-10
FOXP3	18	1.46E-10
CEBPB	19	1.96E-10
TBX21	20	2.28E-10

Tyr-CreER^{T2}*Nras*$^{Q61R/Q61R}$

Transcription Factor	rank	1st Sample p-value
GFI1	1	1.47E-15
SMARCA4	2	2.84E-14
RBFOX2	3	5.95E-14
KDM1A	4	2.62E-13
NEUROD2	5	2.94E-13
KDM2B	6	3.92E-13
KDM4C	7	6.71E-13
CEBPB	8	4.33E-12
H2AZ	9	5.84E-12
TFAP2C	10	1.71E-11

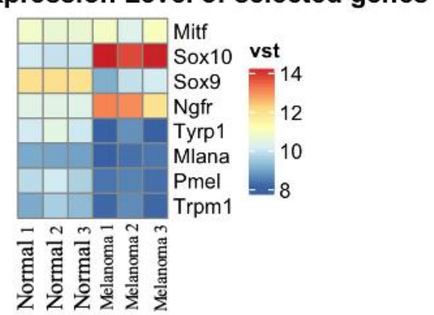
Transcription Factor	rank	1st Sample p-value
NANOG	11	8.90E-11
RXRA	12	1.09E-10
FGFR1	13	3.23E-10
ZFP57	14	3.41E-10
FLI1	15	5.56E-10
GATA2	16	7.99E-10
ERG	17	1.27E-09
TCF12	18	1.32E-09
ESR1	19	7.60E-09
IKZF2	20	1.15E-08

E

Dct-Cre *Nras*$^{Q61R/+}$

Melanoma

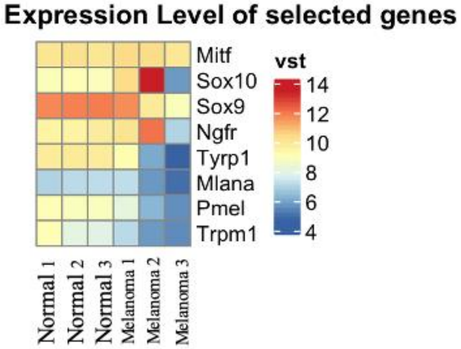
Expression Level of selected genes



Tyr-CreER^{T2}*Nras*$^{Q61R/Q61R}$

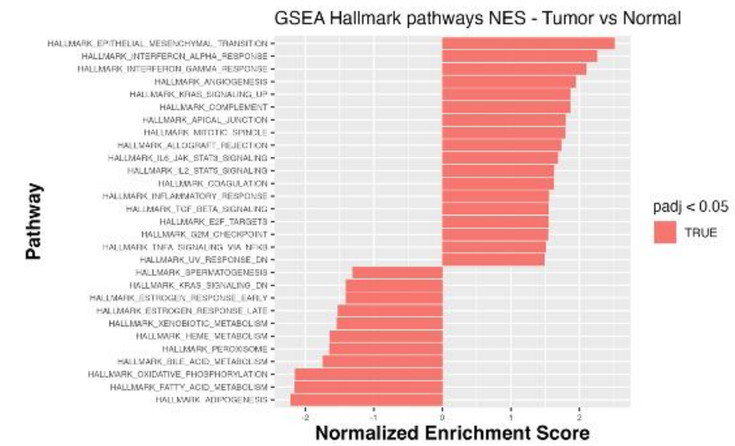
Melanoma

Expression Level of selected genes

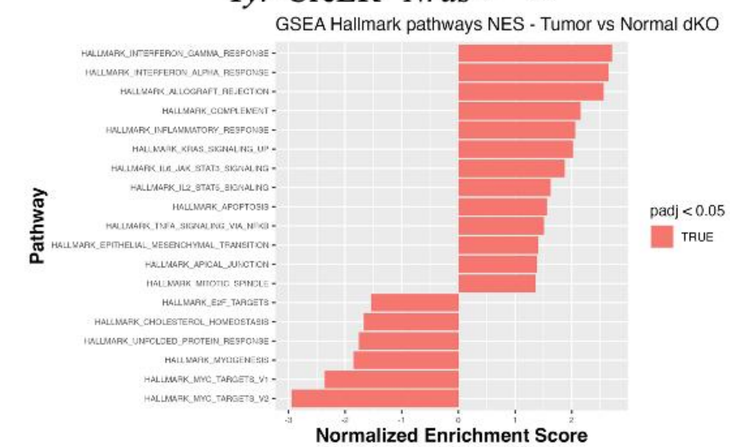


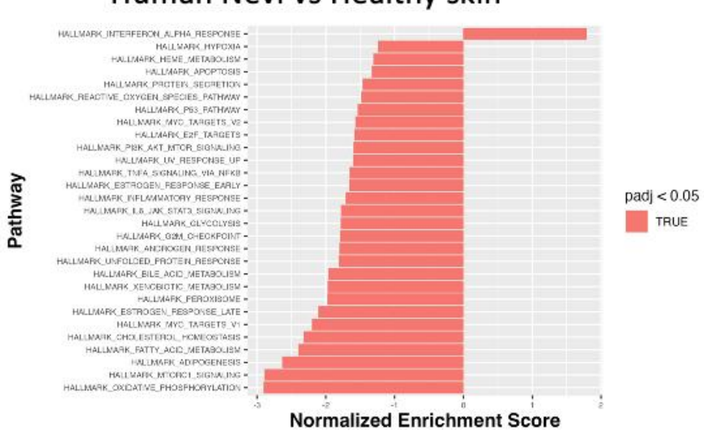
F

Dct-Cre *Nras*$^{Q61R/+}$



Tyr-CreER^{T2}*Nras*$^{Q61R/Q61R}$



G

Human Nevi vs Healthy skin