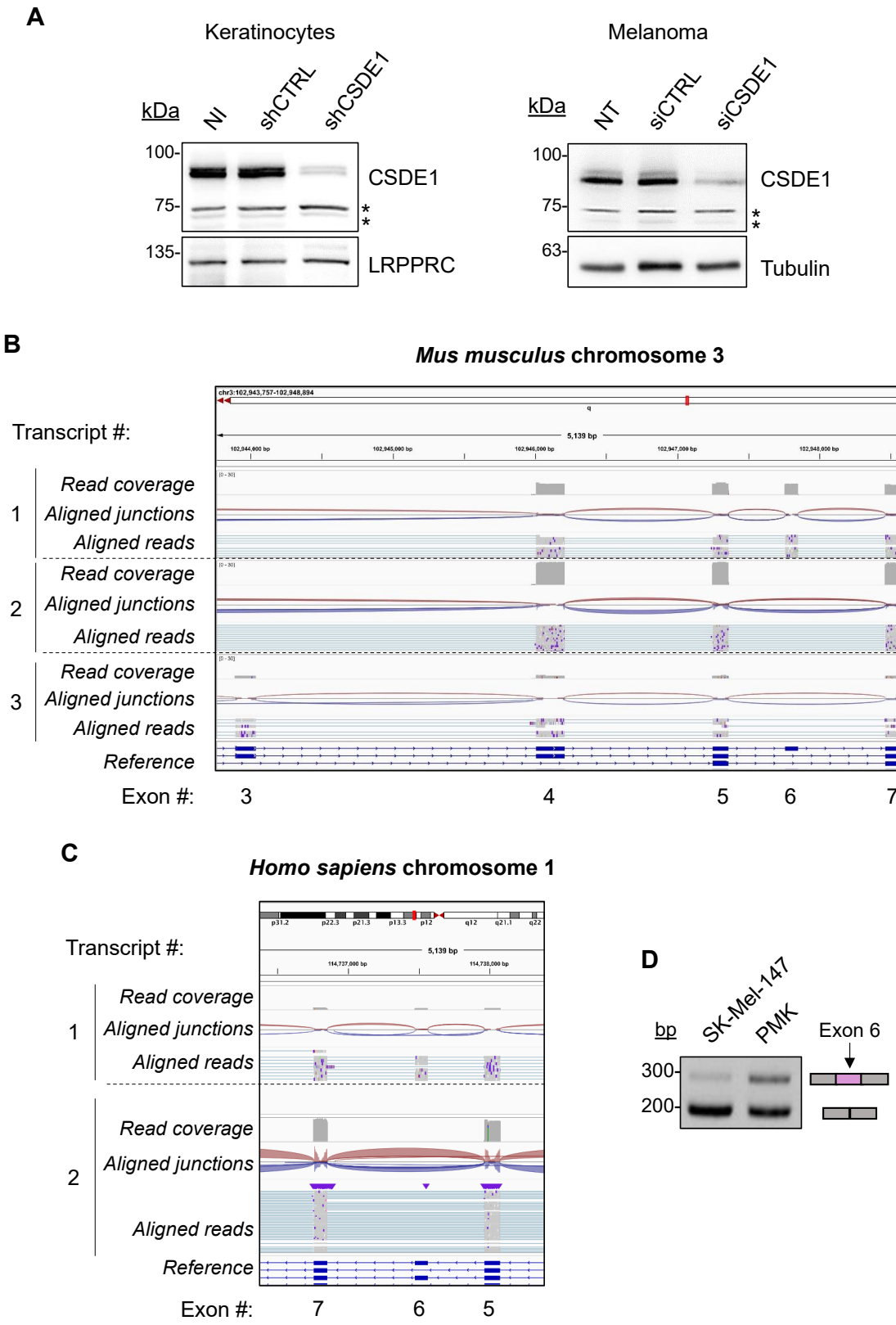


**Figure S1. CSDE1 isoforms in PMK and melanoma cells. (A)** Depletion of CSDE1 in PMK (left) and in SK-Mel-147 (right) to confirm identity of bands. LRPPRC and tubulin are shown as loading controls. Asterisks denote non-specific bands. NI, not infected. NT, not transfected. **(B)** and **(C)** Snapshot of IGV tracks showing Nanopore read coverage for detected *csde1* transcripts. **(D)** Validation of exon 6 inclusion by semi-quantitative PCR.

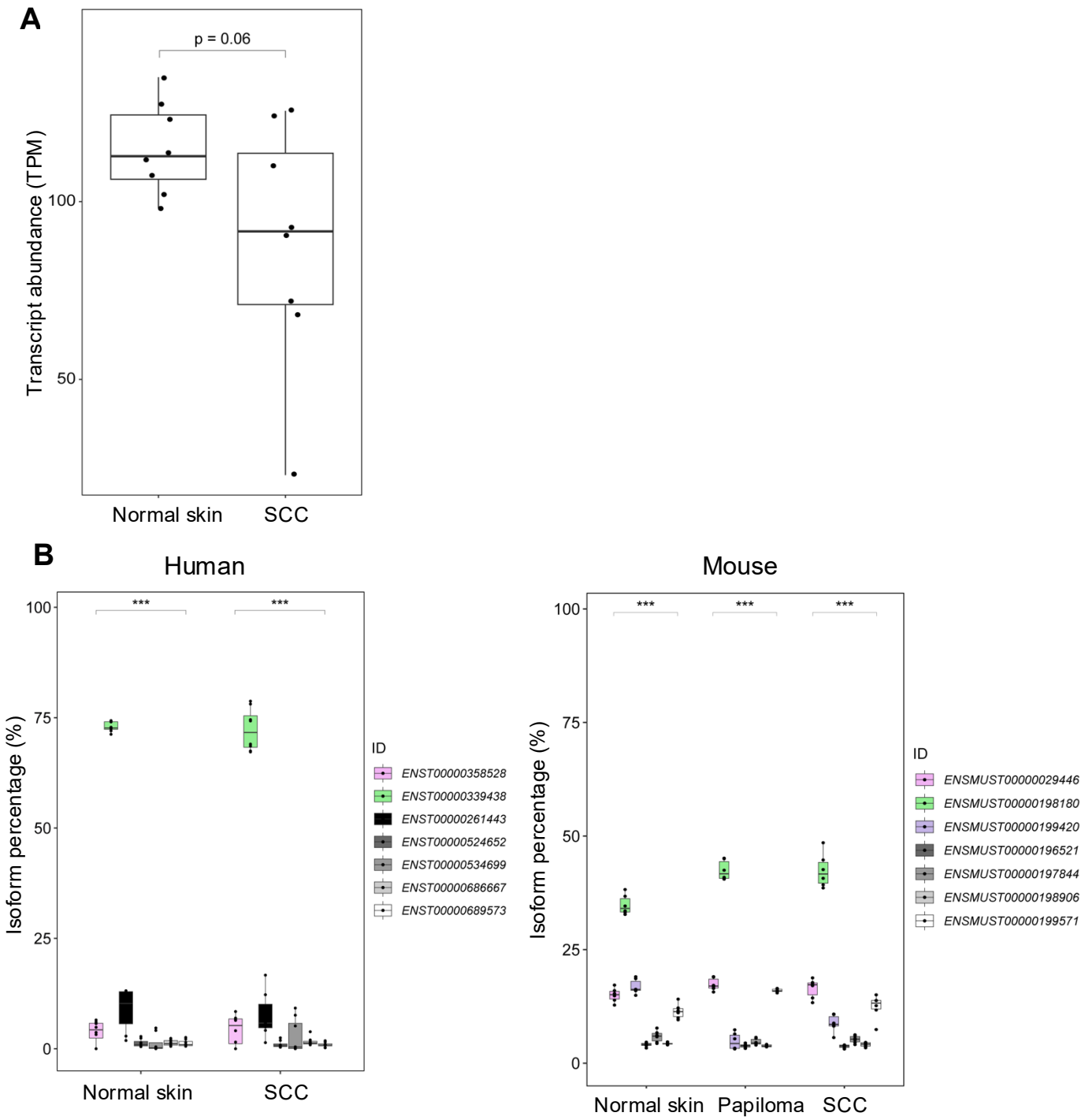


**Figure S2. CSDE1 transcript expression in squamous cell carcinoma (SCC). (A)** Global CSDE1 mRNA levels in matched normal skin and cutaneous SCC patient samples. TPM, transcripts per million. Significance was assessed by t-test. **(B)** CSDE1 isoform expression in human (left) and mouse (right) samples. Preneoplastic papilloma is included in mice. Transcript identities are indicated on the right. Color code is as in Figures 1 and 2B. Significance was assessed with ANOVA (*** $P \leq 0.001$ ).

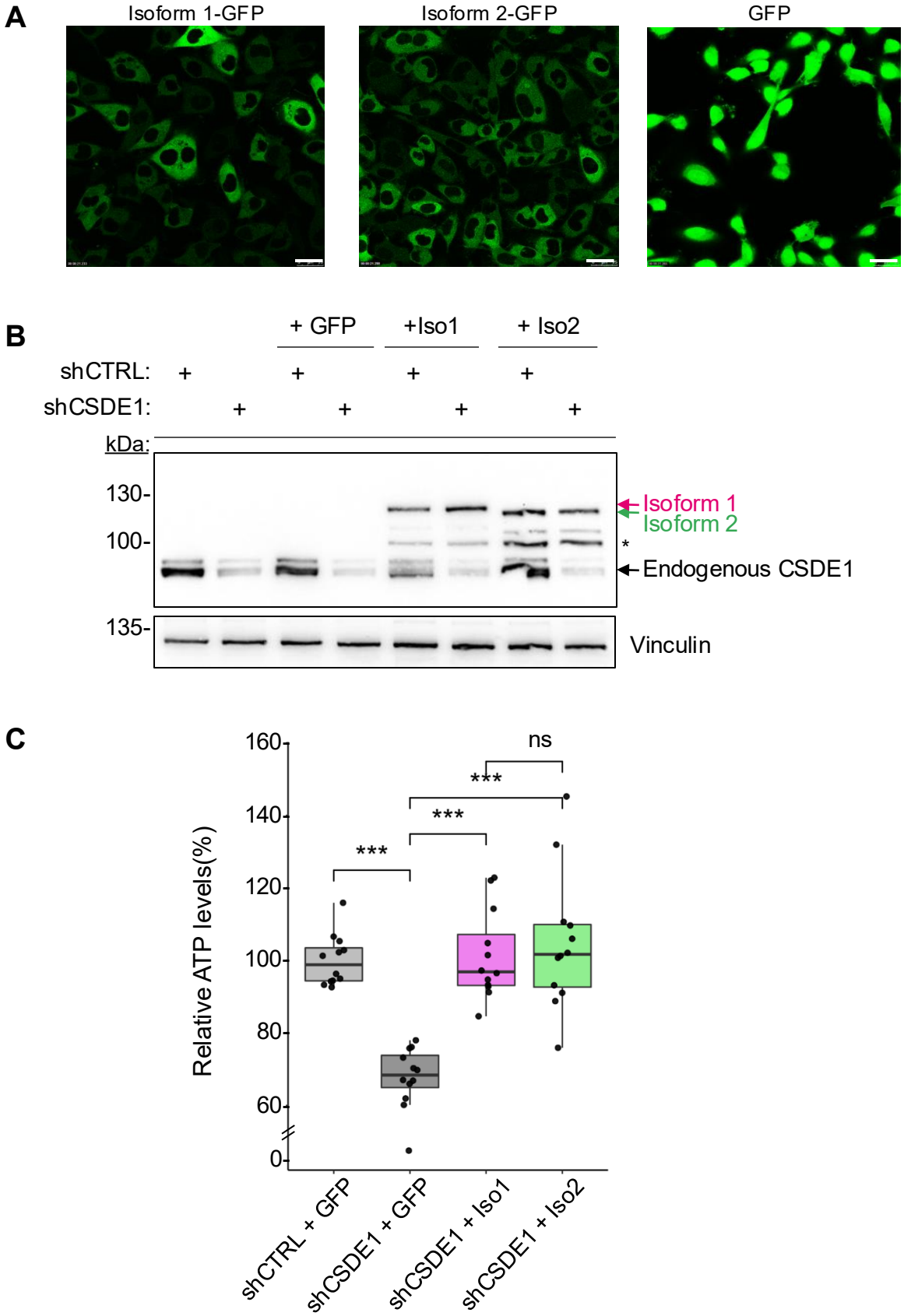


**Figure S3. CSDE1 isoform replacement. (A)** Intracellular localization of CSDE1-GFP isoforms assessed by wide-field fluorescent live imaging. Scale bar, 25 µm. **(B)** CSDE1 isoform expression in UACC-62 cells. Representative Western blot showing both endogenous and exogenous CSDE1 upon depletion (shCSDE1) or not (shCtrl) of the endogenous protein. Vinculin is used as loading control. **(C)** Effect of individual CSDE1 isoforms on UACC-62 anoikis resistance. Box plots represent two biological replicates with five technical replicates. Values were normalized to the average of shCTRL-GFP samples. Significance was assessed by Student's t-test (* $P \leq 0.05$, ** $P \leq 0.01$).

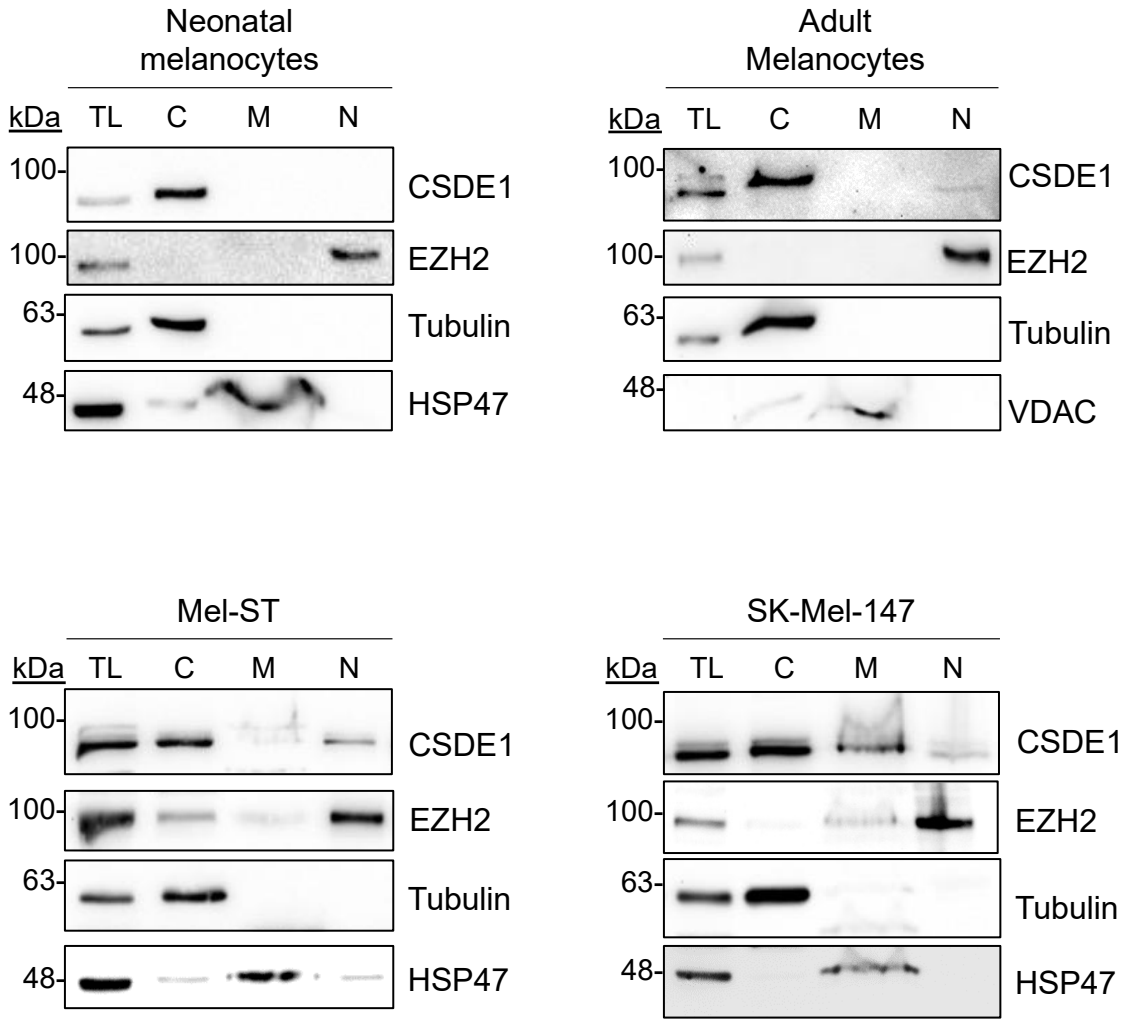


**Figure S4. CSDE1 intracellular localization in cells of melanocytic origin.** CSDE1 Western blots shown in Fig 7A with the corresponding fractionation controls. Markers for nuclei (EZH2), cytosol (Tubulin) and membrane fractions (HSP47, VDAC) were used. TL, total lysate; N, nucleus; C, cytosol; M, membranes.