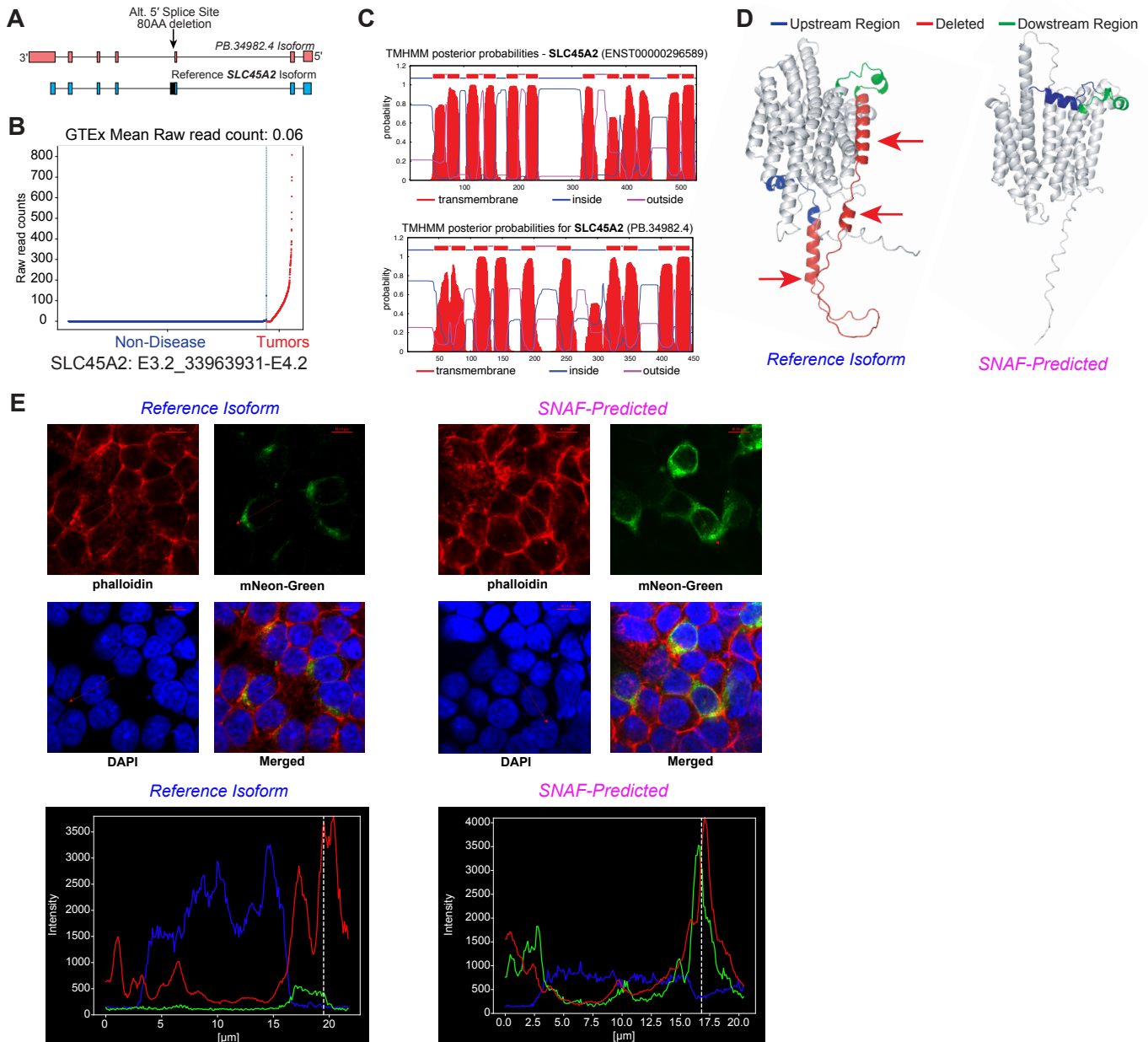


Supplementary Figure 10



Supplementary Figure 10. SLC45A2 encodes for a neo-transmembrane isoform localized to the plasma membrane. A) Melanoma long-read confirmed (Iso-Seq) SNAF-B predicted full-length isoform in the transmembrane protein SLC45A2, corresponding to the same observed shared splicing neoantigen predicted by SNAF T (Supplementary Figure 5B). B) This exon-exon junction is only observed in tumors and not in controls. C) The resultant protein translation, with an excluded 80AA polypeptide sequence, is predicted to disrupt a transmembrane domain and result in the extracellular exposure of residues that are normally cytoplasmic. D) AlphaFold2 3D modeling of the reference isoform and the long-read verified ExNeoEpitope, with extracellular exposed cytoplasmic sequence (blue/green colored residues). E) Co-localization of the SLC45A2 reference or melanoma specific splice isoform with a cell surface stain (phalloidin) by confocal microscopy. Fluorescent intensity along the indicated red line crossing the cell membrane is quantified in the bottom line plots for each of the three indicated channels (color corresponding to the above image) for all reference and SNAF-B isoforms.