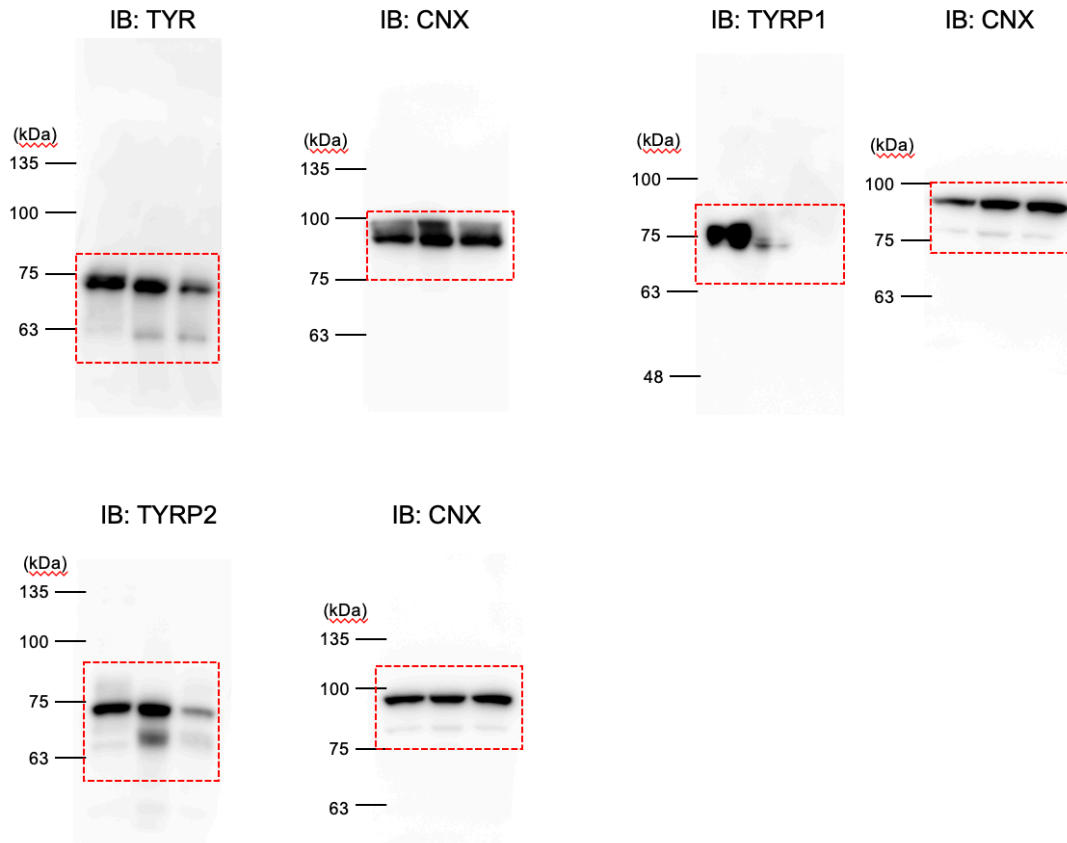
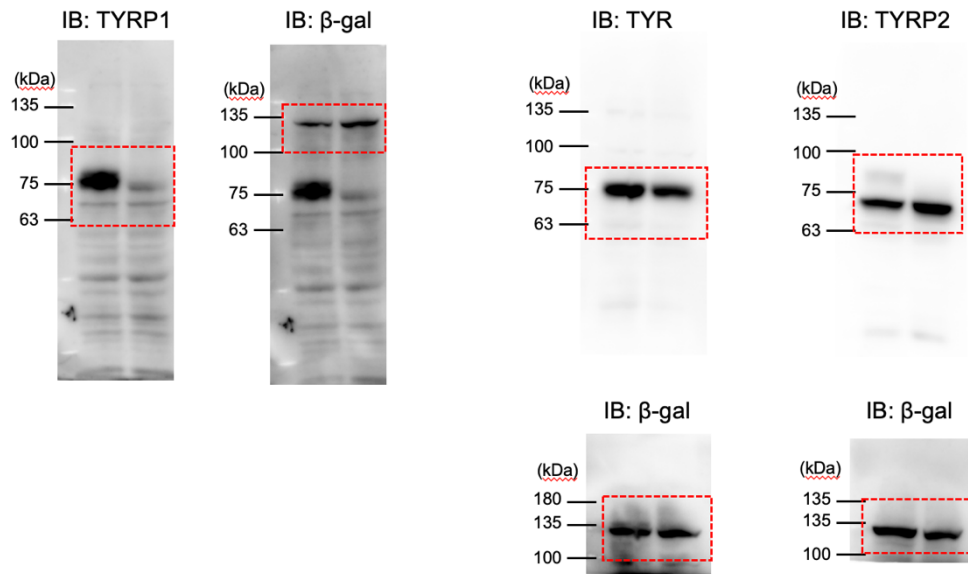
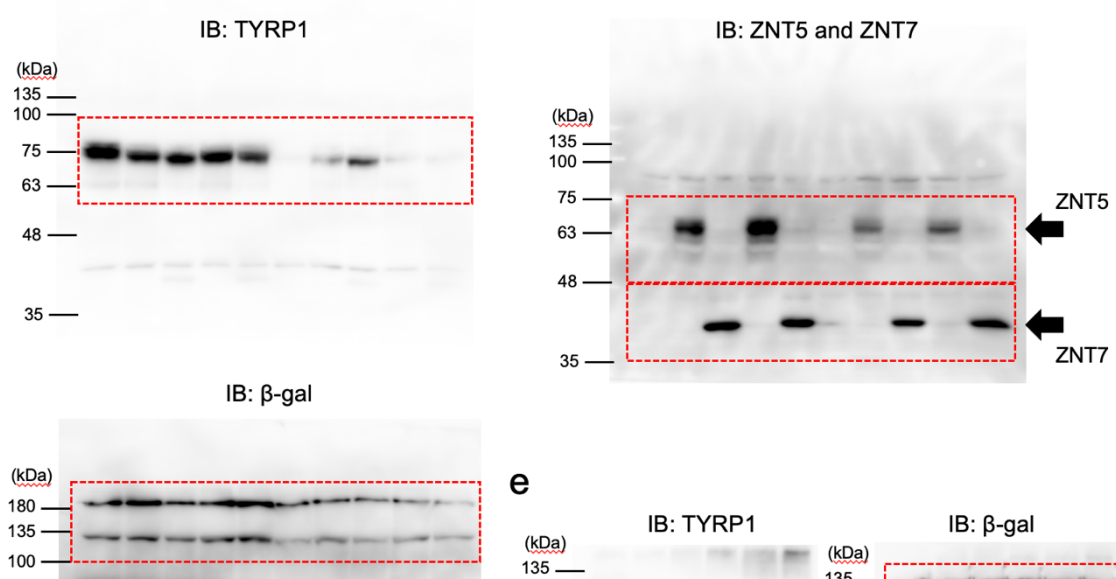
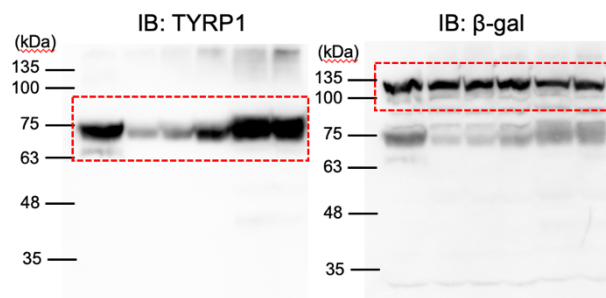


Supplementary Figure 1. Full-length immunoblot and RT-PCR images used in Figure 3. The panel used is boxed. In a, c, and e, the same blot was used sequentially (after stripping) for detection in each composite figure. The molecular weights of the marker proteins are indicated on the left of the immunoblot images.

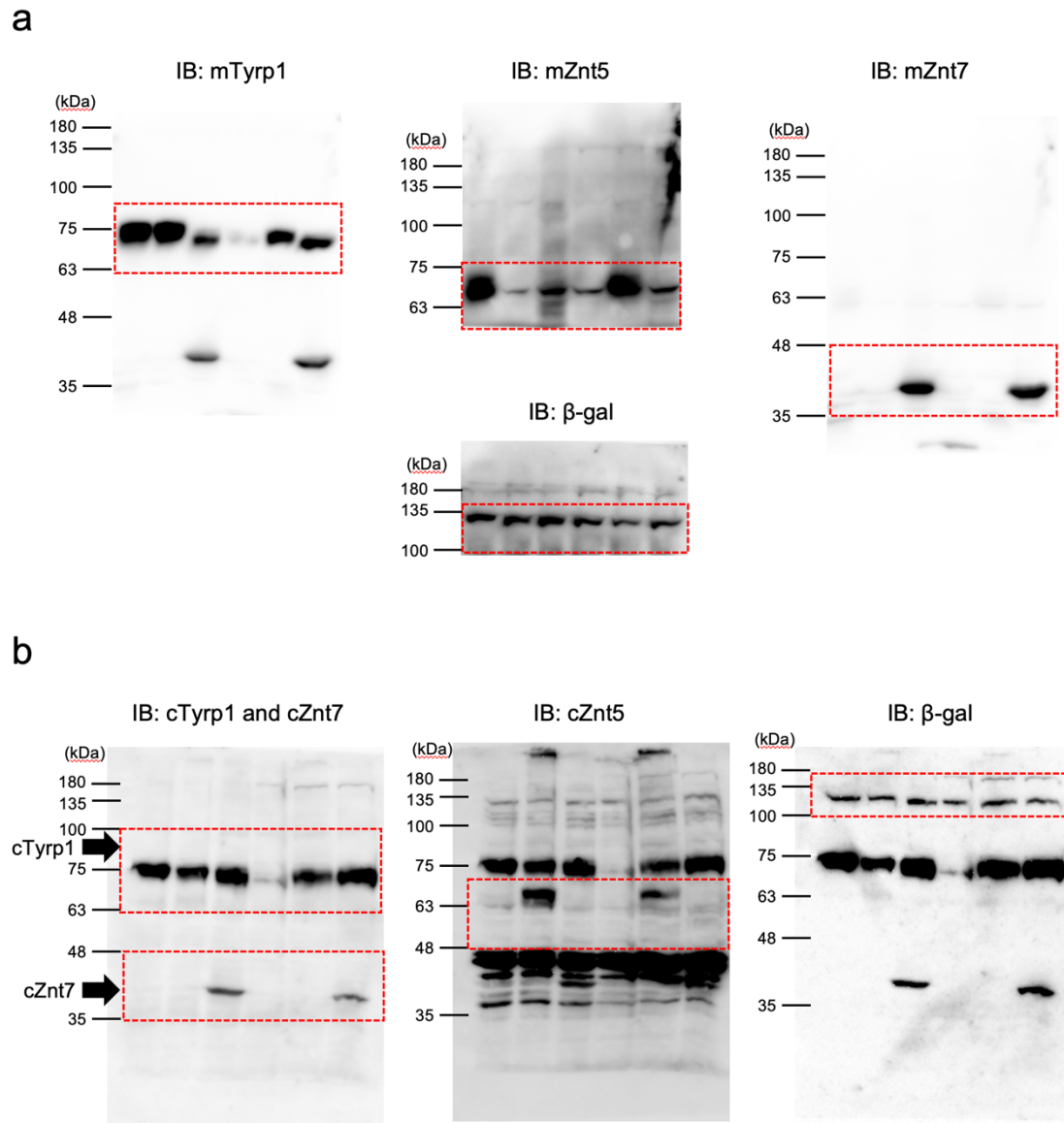
a



Supplementary Figure 2. Full-length immunoblot images used in Figure 4. The panel used is boxed. The same blot was used sequentially (after stripping) for detection in each composite figure. The molecular weights of the marker proteins are indicated on the left of the immunoblot images.

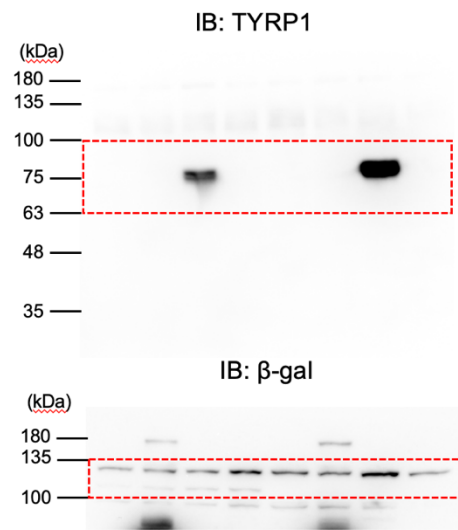
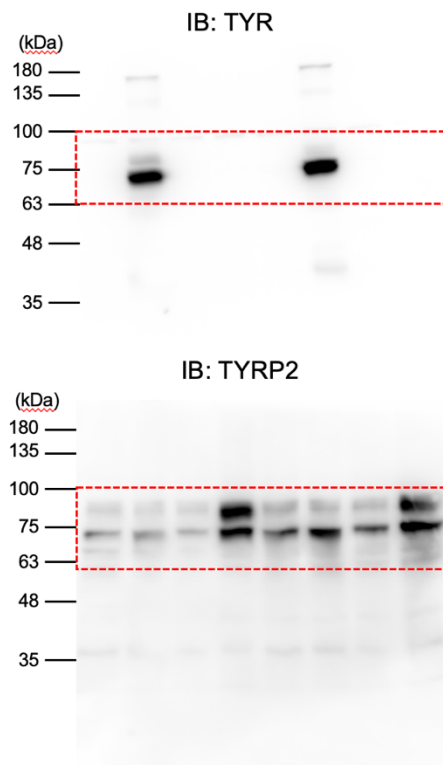
a**c****e**

Supplementary Figure 3. Full-length immunoblot images used in Figure 5. The panel used is boxed. The same blot was used sequentially (after stripping) for detection in each composite figure. The molecular weights of the marker proteins are indicated on the left of the immunoblot images.

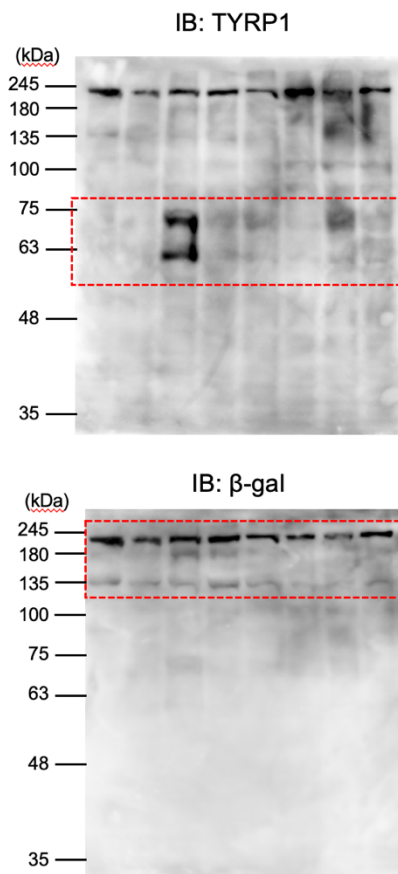
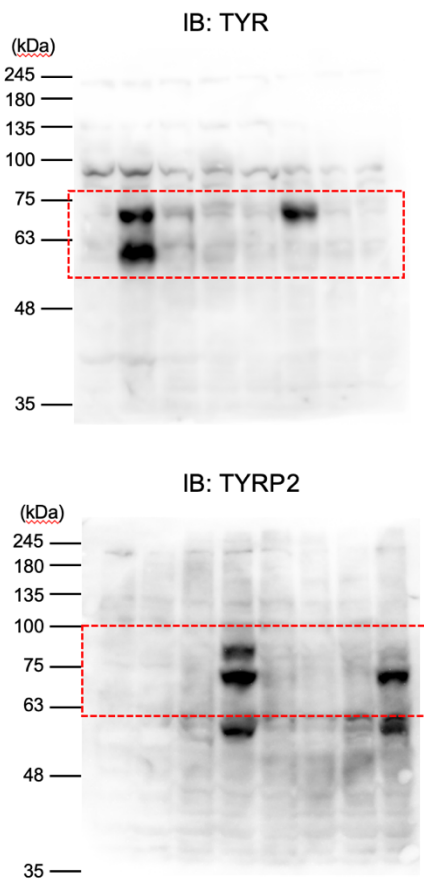


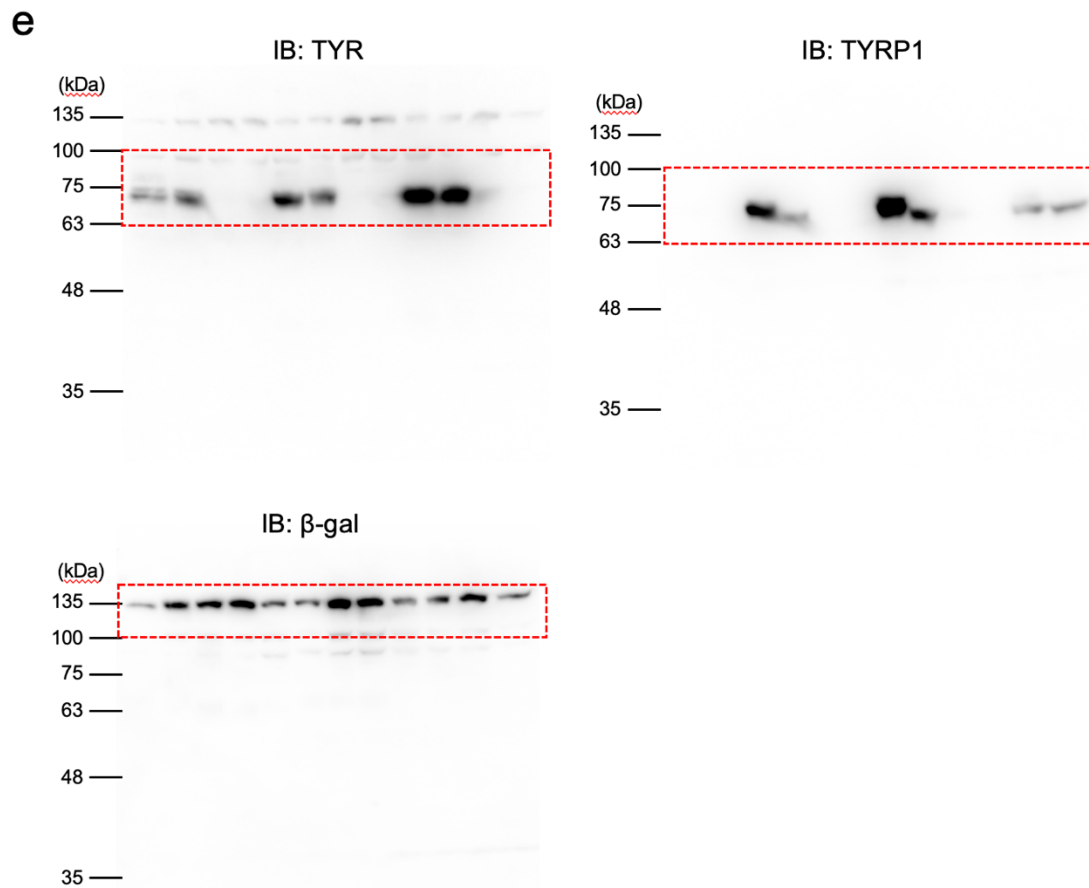
Supplementary Figure 4. Full-length immunoblot images used in Figure 6. The panel used is boxed. The same blot was used sequentially (after stripping) for detection in each composite figure. The molecular weights of the marker proteins are indicated on the right of the immunoblot images.

a



c





Supplementary Figure 5. Full-length immunoblot images used in Figure 7. The panel used is boxed. The same blot was used sequentially (after stripping) for detection in each composite figure. The molecular weights of the marker proteins are indicated on the right of the immunoblot images.

Supplementary Table 1. Primers used for genomic PCR to confirm gene editing in Mewo and SK-MEL-2 cells.

Gene	Forward primer (5' to 3')	Reverse primer (5' to 3')
<i>ZNT5</i>	TGTGTGAAATAGGGTTTCTAATGT AAGTGG	TAATCTTTGAGCTTAATTCCATTC AGTATT
<i>ZNT7</i>	GTGAAGAAAGGAGCATGTGAACT G	CAGAGGTAGGTAACAAAGGTAGG AC
<i>TYRP1</i>	CTTCAAGGCCATGTGGCCAATGT AA	AAGATTCTGAAAGGGTCTTCCCA GC
<i>ATP7A</i>	TCTGTATTCTGTAATGGGGCT	AGCTGAAAATAAACCTTGCCTG

Supplementary Table 2. Primers used in RT-PCR analysis.

Gene	Forward primer (5' to 3')	Reverse primer (5' to 3')
<i>TYRP1</i>	GCTGCCTGTGACCAGAGGGTTCTC ATAGTC	GGTCATACTTTCCCGTGGGGTCACT GTAAC
<i>βACTIN</i>	CATGTACGTTGCTATCCAGGCTGT GCTATC	GTCATACTCCTGCTTGCTGATCCAC ATCTG