

CORRECTION

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Correction: Small molecule treatment alleviates photoreceptor cilia defects in LCA5-deficient human retinal organoids

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In Fig. 1 of this article [1], an image of iPSC in panel B is missing and have now been corrected in the original publication.

For completeness and transparency, both correct and incorrect versions are displayed below.

[†]Dimitra Athanasiou and Tess A.V. Afanasyeva contributed equally to this work.

The original article can be found online at <https://doi.org/10.1186/s40478-025-01943-y>.

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Incorrect Fig. 1.

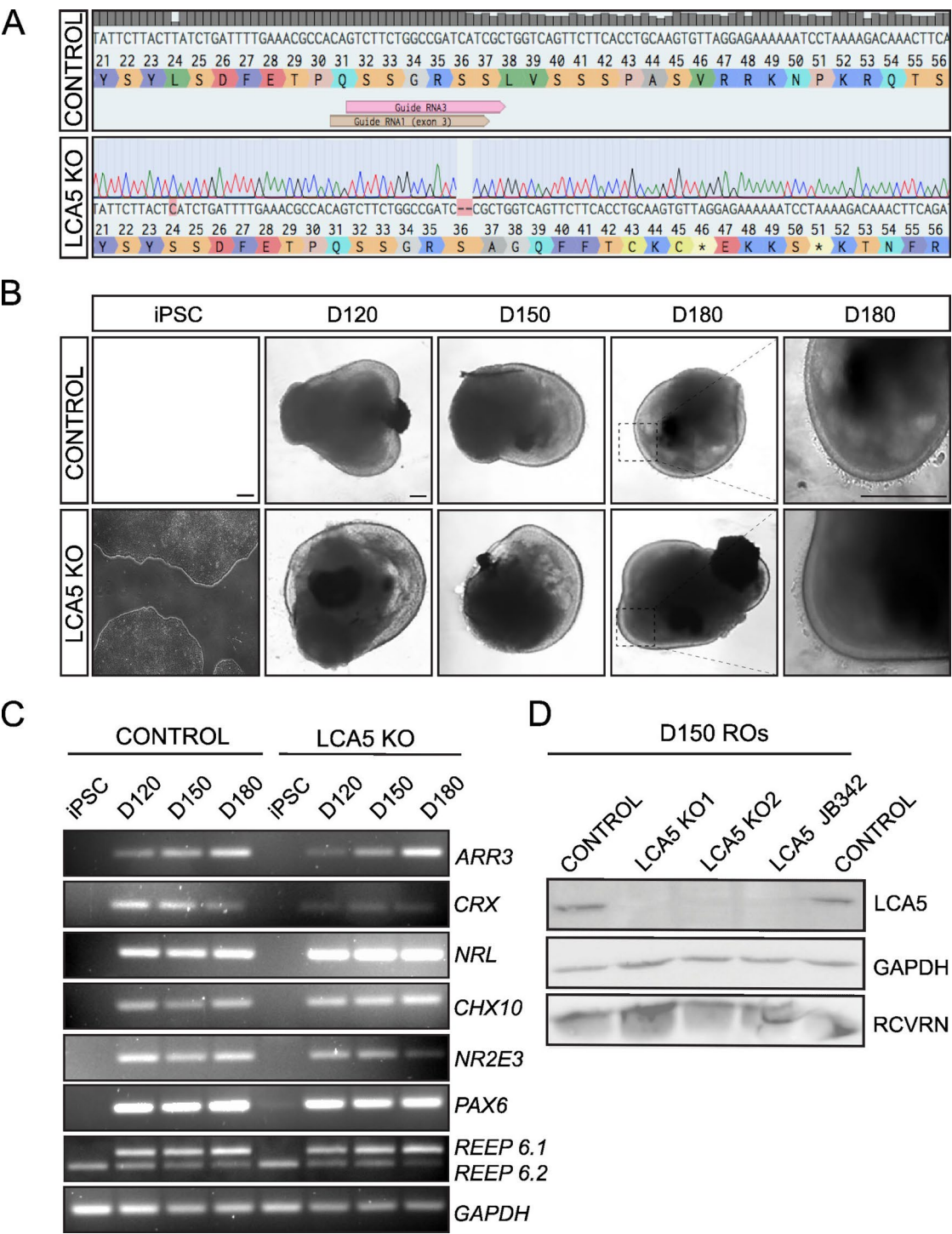


Fig. 1 Generation of LCA5 KO and isogenic control iPSCs and differentiation to retinal organoids. **A**) Sanger sequence trace of LCA5 KO iPSC (LCA5 KO1) showing a 2-bp deletion in exon 3 of *LCA5* gene generated by CRISPR/Cas9 and NHEJ gene editing. **B**) Bright-field images of iPSC-derived LCA5 KO and isogenic control retinal organoids at D120, D150 and D180 of retinal development. Inset boxes showing the development of photoreceptor brush borders which start to emerge at D180. Scale bars 250 μ m. **C**) RT-PCR of isogenic control and LCA5 KO iPSC and retinal organoids ($n = 2$ per condition from one differentiation) at D120, D150 and D180 for retinal differentiation markers *ARR3*, *CRX*, *NRL*, *CHX10*, *NR2E3*, *PAX6*, *REEP6.1* (upper band), *REEP6.2* (lower band). GAPDH was used as a reference transcript. **D**) Western blot of control, LCA5 KO (KO1 and KO2) and LCA5 JB342 patient retinal organoids at D150 showing successful knockdown of LCA5 protein. Recoverin (RCVRN) was used as a photoreceptor-specific marker and GAPDH as a loading control. Results are from pooling together $n = 3$ retinal organoids per condition from two differentiations per line

Correct Fig. 1.

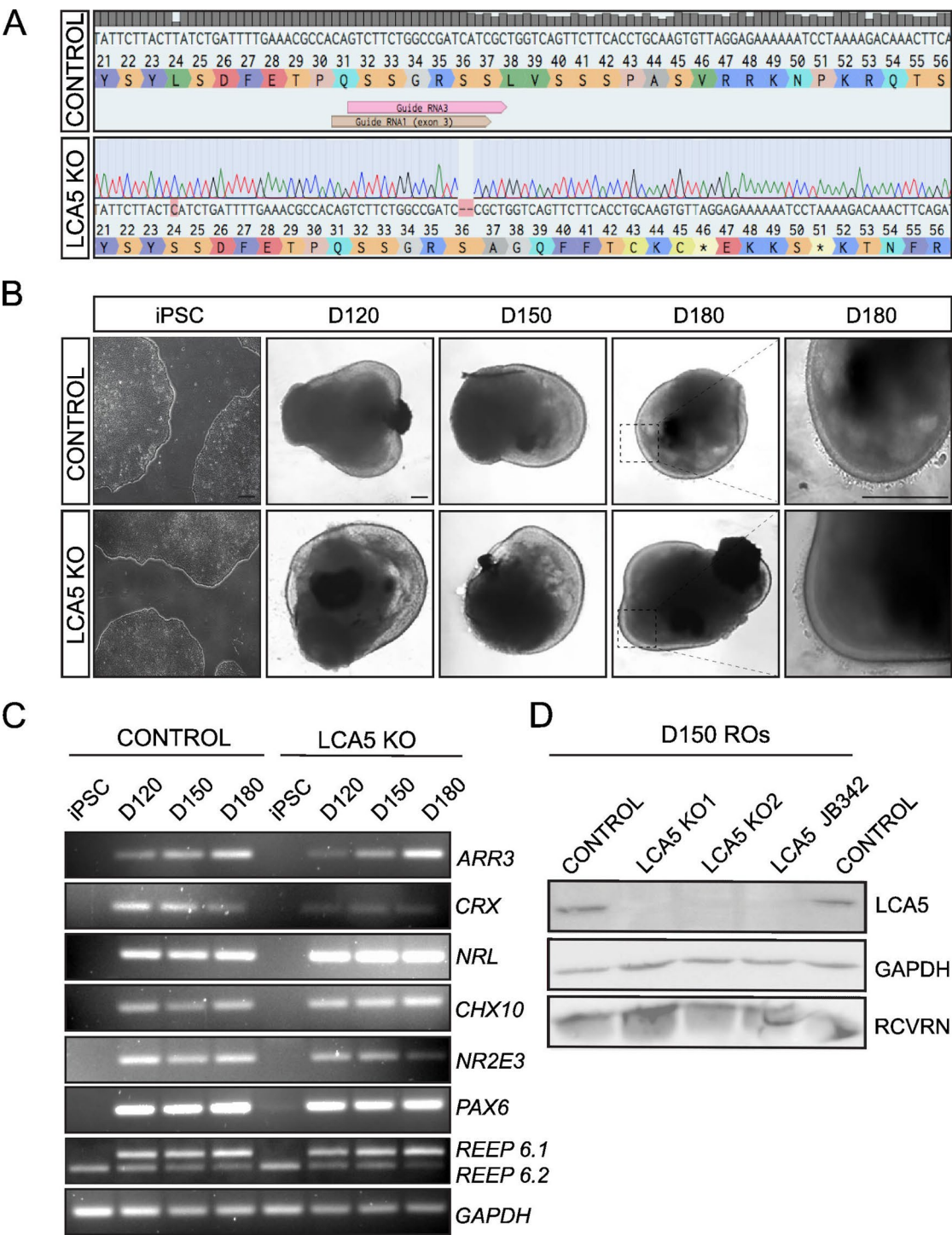


Fig. 2 Generation of LCA5 KO and isogenic control iPSCs and differentiation to retinal organoids. **A**) Sanger sequence trace of LCA5 KO iPSC (LCA5 KO1) showing a 2-bp deletion in exon 3 of *LCA5* gene generated by CRISPR/Cas9 and NHEJ gene editing. **B**) Bright-field images of iPSC-derived LCA5 KO and isogenic control retinal organoids at D120, D150 and D180 of retinal development. Inset boxes showing the development of photoreceptor brush borders which start to emerge at D180. Scale bars 250 μ m. **C**) RT-PCR of isogenic control and LCA5 KO iPSC and retinal organoids ($n = 2$ per condition from one differentiation) at D120, D150 and D180 for retinal differentiation markers *ARR3*, *CRX*, *NRL*, *CHX10*, *NR2E3*, *PAX6*, *REEP6.1* (upper band), *REEP6.2* (lower band). *GAPDH* was used as a reference transcript. **D**) Western blot of control, LCA5 KO (KO1 and KO2) and LCA5 JB342 patient retinal organoids at D150 showing successful knockdown of LCA5 protein. Recoverin (*RCVRN*) was used as a photoreceptor-specific marker and *GAPDH* as a loading control. Results are from pooling together $n = 3$ retinal organoids per condition from two differentiations per line

The original article has been corrected.

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References

1. Athanasίου D, Afanasyeva TA, Chai N et al (2025) Small molecule treatment alleviates photoreceptor cilia defects in LCA5-deficient human retinal