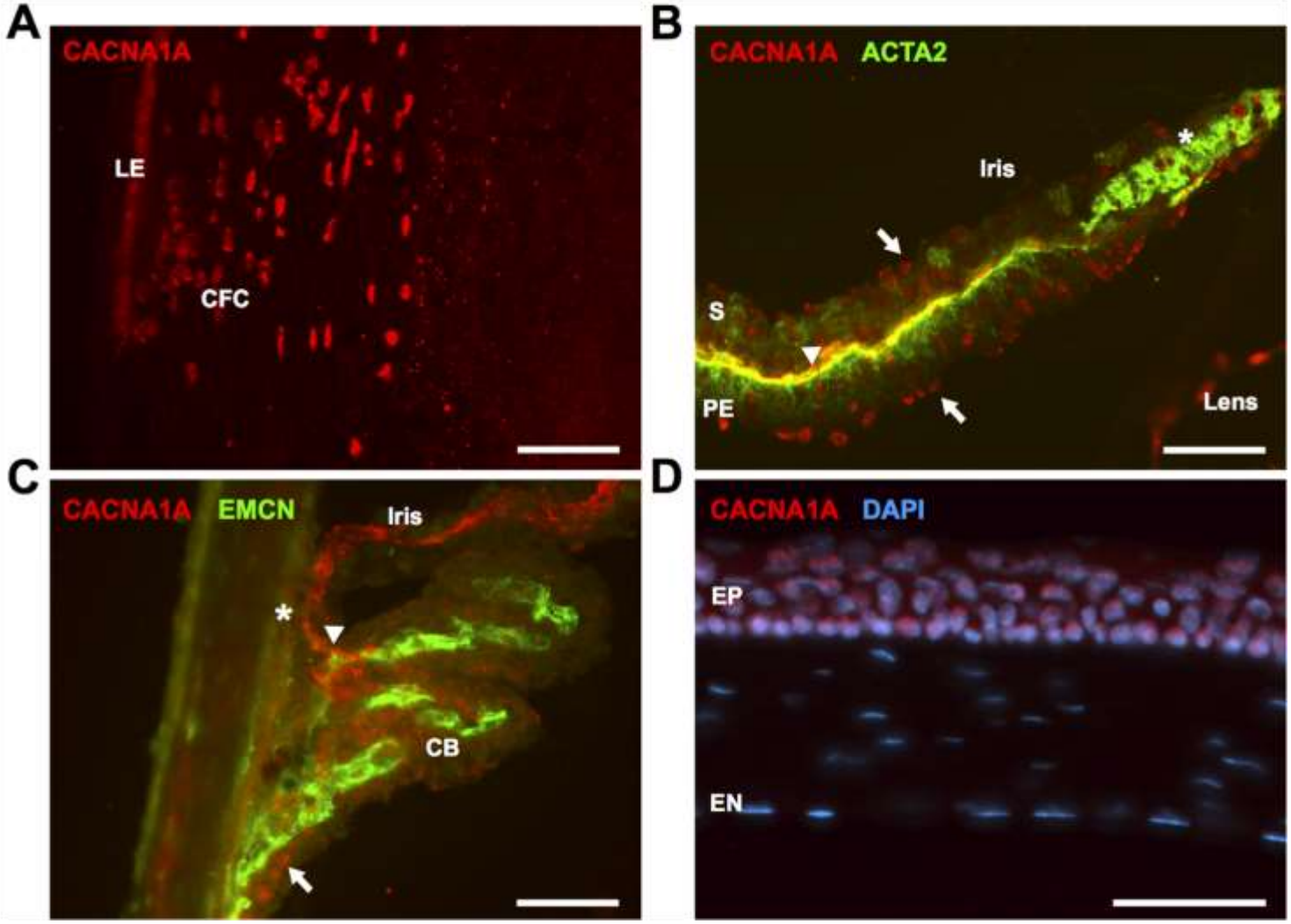
Supplementary Figure 14: CACNA1A expression in adult mouse anterior ocular tissues

Cells in the mouse lens, iris, ciliary body, and cornea express CACNA1A as detected by immunoflourescent labeling. (A) High magnification of the lens showed epithelial cells (LE) and cortical fiber cells (CFC) that expressed CACNA1A (red). As judged by absence of anti-CACNA1A, other areas of the lens did not exhibit CACNA1A expression (not shown). (B) Expression of CACNA1A (red) is observed in distinct regions of the iris. B6(Cg)-Tyrc-2J/J mice were used to allow assessment in the absence of pigmentation. Labeling by CACNA1A and smooth muscle Actin (ACTA2; green) show strong overlap (yellow) in the dilator muscle (arrowhead), which separates the anterior iris stroma (S) and the iris pigmented epithelium (PE). Low CACNA1A expression was detected in the sphincter muscle (*). Subsets of cells in the S and PE also express CACNA1A (arrows). (C) The mouse iris is continuous with the ciliary body (arrowhead). The vascular stroma of the ciliary body (CB) is labeled by Endomucin (EMCN, green) and does not co-label with CACNA1A (red). A subset of cells in the ciliary epithelium also expresses CACNA1A (arrow). The iridocorneal angle in this image is compressed due to sectioning artifact (*). CACNA1A expression was considered low or absent in the trabecular meshwork. (D) CACNA1A (red) was expressed in the corneal epithelium (EP), but not in the corneal endothelium (EN). Nuclei were counterstained with DAPI (blue). Scale bars: 50 μm.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