Supplemental Figure 1. Effect of inhibition of ROCK on apoptosis of ex vivo human corneal endothelium.

The human tissue specimens used in this study were handled in accordance with the tenets set forth in the Declaration of Helsinki. Informed written consent was obtained from the next of kin of all deceased donors with regard to eye donation for research. Human donor corneas were obtained from SightLife™ (http://www.sightlife.org/, Seattle, WA). Specimens were recovered under the tenets of the Uniform Anatomical Gift Act (UAGA) of the particular state in which the donor consent was obtained and the tissue recovered. Human corneal specimens were placed corneal endothelial side up and exposed to UV (100J/m²) using the UV CrossLinker CX-2000 and further incubated in Dulbecco’s modified Eagle’s medium for 24 hours.

Annexin V positive apoptotic CECs were observed at a level of 20.3% in human corneas UV-irradiated for 24 hours, but treatment with Y-27632 suppressed this percentage to 3.1% (Supplemental Fig. 1A and 1B). Values are the averages of 4 independent corneas. Scale bar: 50 μm. *p <0.01.