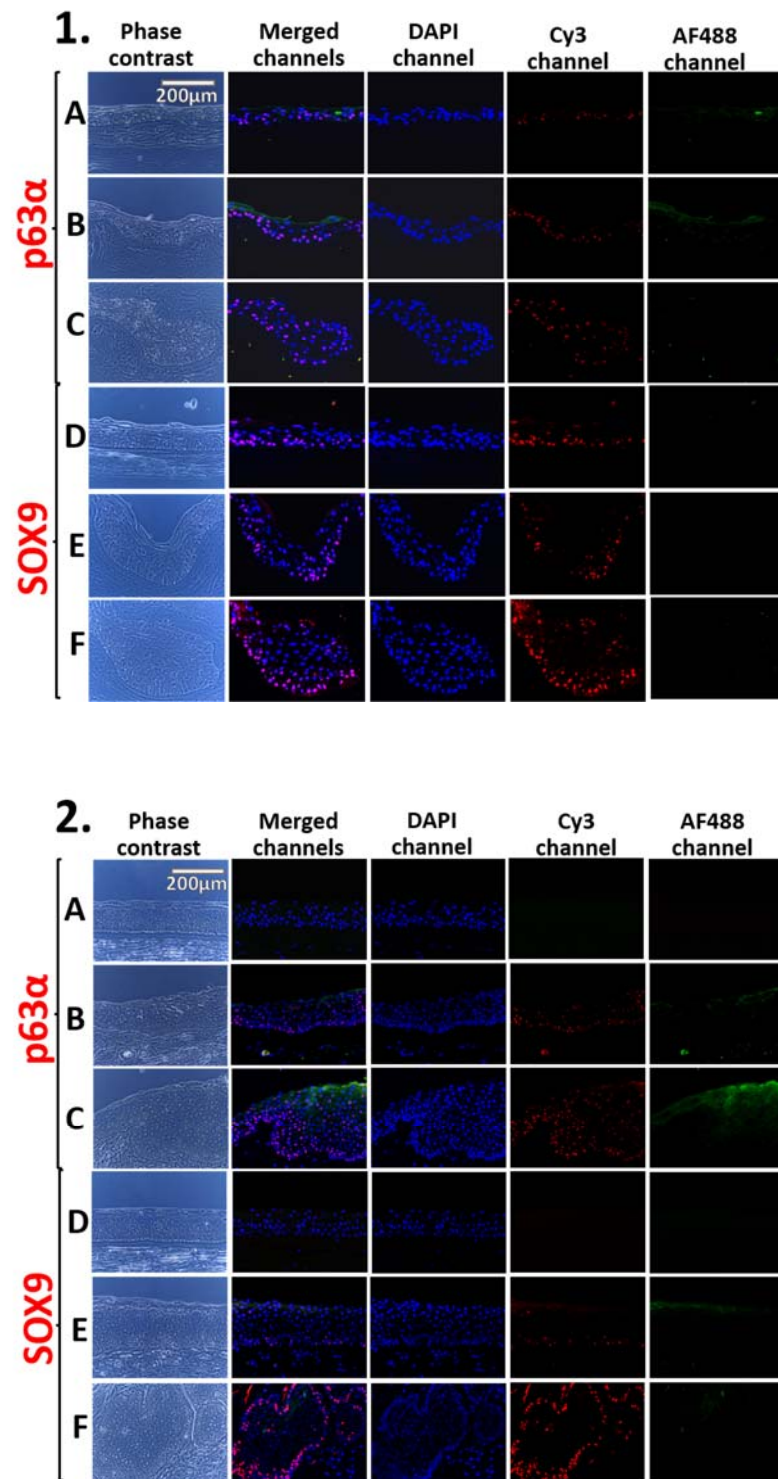
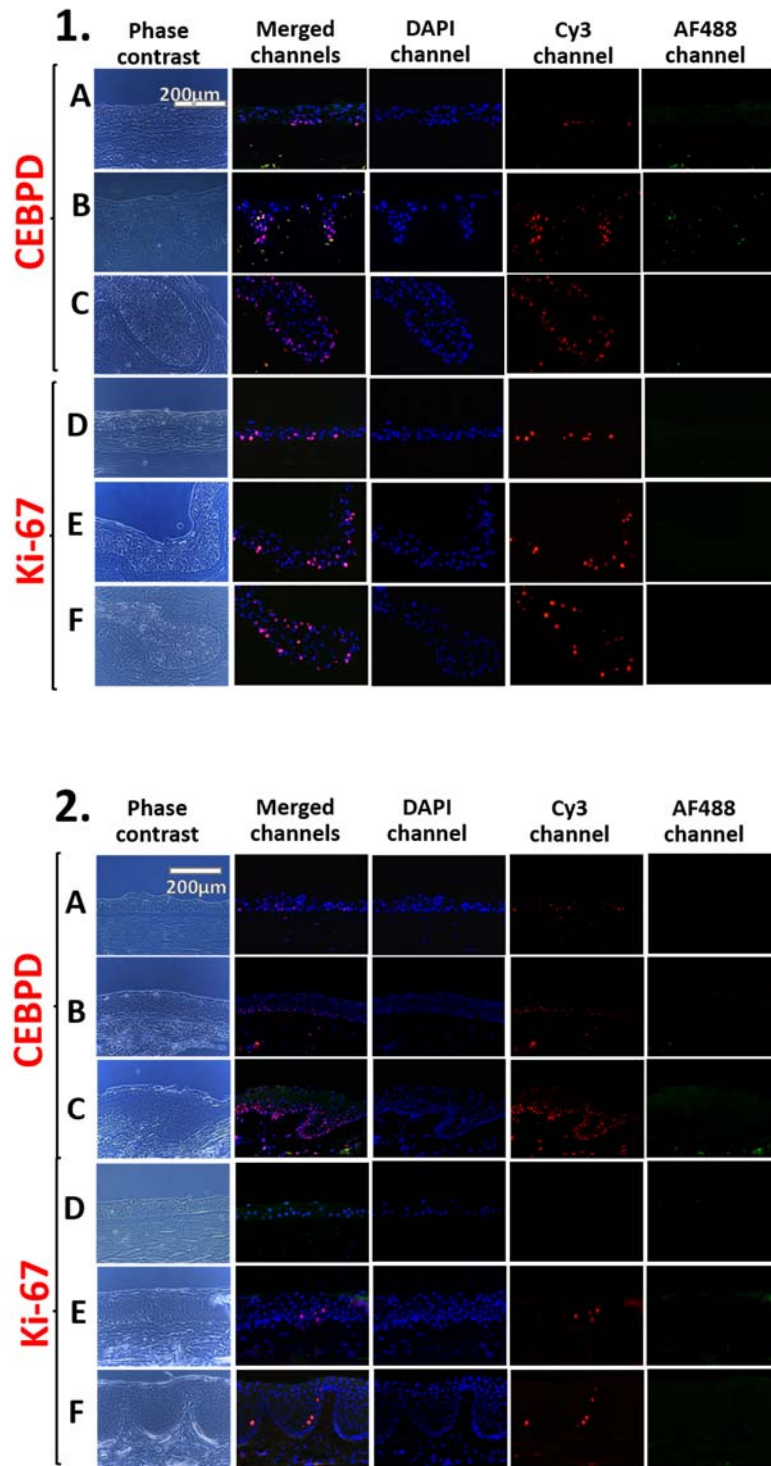


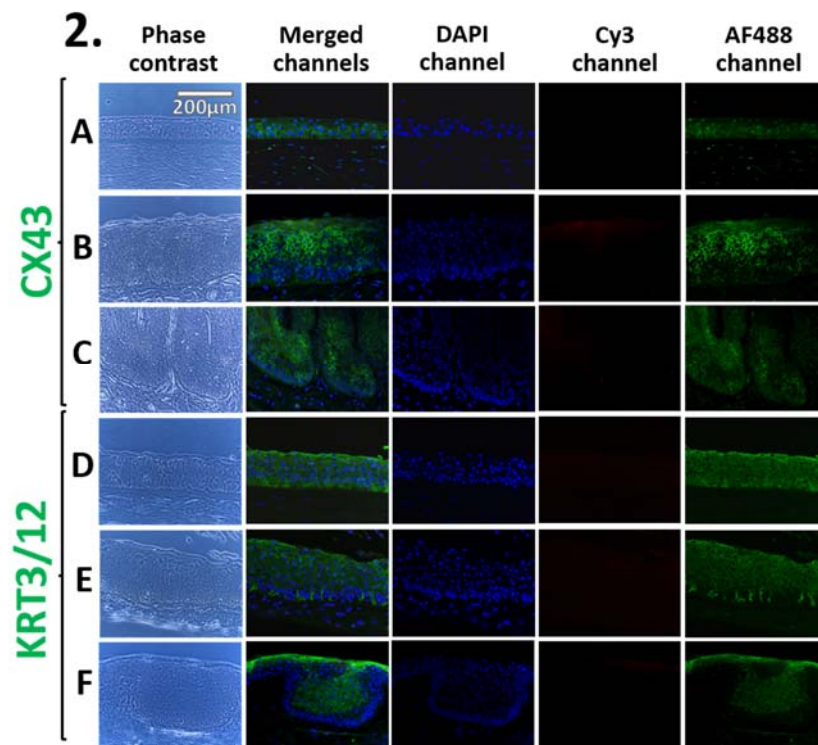
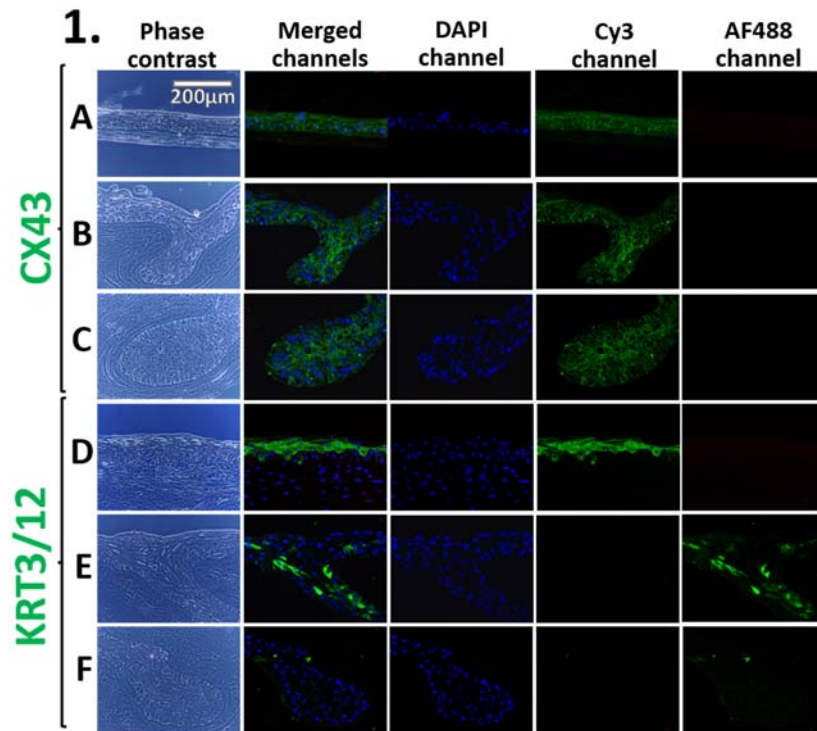
## Supplementary information



**Figure S1.** The p63 $\alpha$  and SOX9 marker staining of the expanded limbal epithelial tissue on the human amniotic membrane (HAM) *ex vivo* (1. A-F) and corneal-limbal tissue *in situ* (2. A-F). Phase contrast (the first row to the left) images, as well as images of the merged and individual channels of the fluorescence immunohistochemistry (right) are presented.



**Figure S2.** The CEBPD and Ki-67 marker staining of the expanded limbal epithelial tissue on the human amniotic membrane (HAM) *ex vivo* (**1. A-F**) and corneal-limbal tissue *in situ* (**2. A-F**). Phase contrast (the first row to the left) images, as well as images of the merged and individual channels of the fluorescence immunohistochemistry (right) are presented.



**Figure S3.** The CX43 and KRT3/12 marker staining of the expanded limbal epithelial tissue on the human amniotic membrane (HAM) *ex vivo* (1. A-F) and corneal-limbal tissue *in situ* (2. A-F). Phase contrast (the first row to the left) images, as well as images of the merged and individual channels of the fluorescence immunohistochemistry (right) are presented.

**Table S1.** List of primary and secondary antibodies used for immunohistochemistry

Primary antibody	Symbol	Reference	Company	Host	Dilution	Clonality
Tumor protein 63 alpha	p63 $\alpha$	4892S	Cell Signalling	Rabbit	1:200	Polyclonal
Proliferation marker Ki-67	Ki-67	RM-9106-S	ThermoScientific	Rabbit	1:200	Monoclonal
CCAAT/enhancer-binding protein delta	CEBPD	Ab198320	Abcam	Rabbit	1:200	Polyclonal
SRY-Box Transcription Factor 9	SOX9	82630	Cell Signalling	Rabbit	1: 200	Monoclonal
Connexin 43	Cx43	C6219	Sigma Aldrich	Rabbit	1: 1000	Polyclonal
Cytokeratin 3/12	KRT3/12	08691431	MP biomedical	Mouse	1:100	Monoclonal
Secondary antibody	Symbol	Reference	Company	Host	Dilution	Clonality
Alexa Fluor® 488 donkey anti-mouseIgG		A21202	Abcam	Mouse	1:500	Monoclonal
Alexa Fluor® 488 donkey anti-rabbitIgG		A21206	Abcam	Rabbit	1:500	Monoclonal
Cy3® goat anti-rabbit IgG		A10520	Abcam	Rabbit	1:500	Monoclonal