

Materials List for:

A Method for Lineage Tracing of Corneal Cells Using Multi-color Fluorescent Reporter Mice

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URL: <https://www.jove.com/video/53370>

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Materials

Name	Company	Catalog Number	Comments
R26R-Confetti transgenic mice homozygous for the Brainbow 2.1 cassette	Jackson	strain #013731	
K14-Cre ^{ERT} mice	Jackson	strain #005107	
tamoxifen	Sigma	T5648	
isoflurane USP Terrell	Piramal Critical Care		
Carprieve 30	b.wt		
DMSO	Sigma	D2650	
DAPI	Sigma	D9542	used at concentration of 4 µg/ml
Immu Mount	Thermo Scientific	9990402	
LSM 510 Meta laser scanning confocal system hooked to an inverted motorized microscope (Axiovert 200M) equipped with a motorized stage	Zeiss		The spectral overlap between GFP, YFP and CFG requires the use of spectral imaging which allows the separation of the emission spectra of the fluorescent proteins. Here we use the Zeiss LSM 510 Meta spectral confocal microscope. The Meta detector included in this system has 32 detector elements each collecting emission from a 10-nanometer waveband. This technique termed "spectral fingerprinting" enables the user to set the most adequate limits for waveband filtering. There is a variety of spectral confocal systems that can be used, including Leica SP5(ref #21), SP8, Zeiss LSM 780 (ref #22).
Zen 2009 Imaging Software	Zeiss		
Duratears-eye ointment	Alcon		