

### Empowering researchers to achieve stellar results

Cellaris (previously known as Luminicell Tracker), is the next-generation cell labelling kit, which contains highly biocompatible fluorescence nanoparticles that are characterised by their exceptional brightness, photo-stability and resilience against various biological processes, yielding strong signal longevity.

The extended duration of its tracking ability is unprecedented, compared with other exogeneous fluorophores, represents a leap forward in long-term live cell monitoring for biodistribution studies, regenerative medicines and other related applications.

#### >10X Brighter Fluorescence Signal

Compared against quantum dots of similar size under same excitation and emission

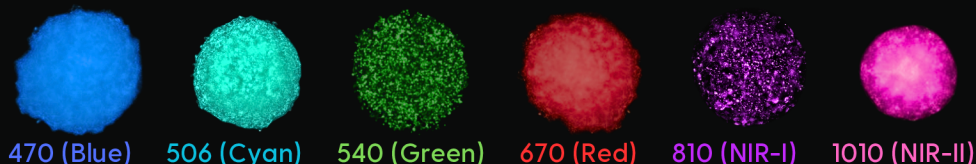
#### Unparalleled Photostability

No observable photobleaching after 30 minutes continuous laser irradiation under full power

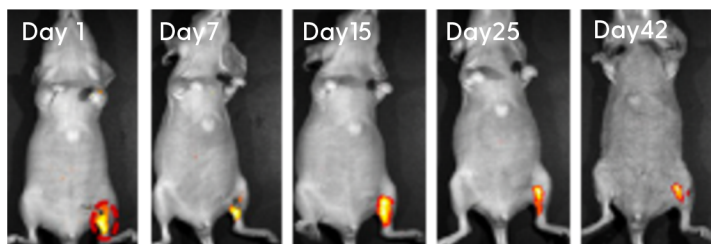
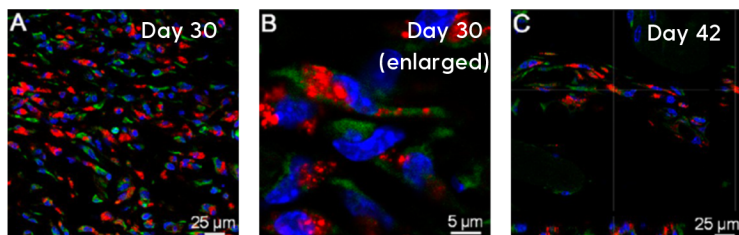
#### Unprecedented Tracking Duration

Up to 10 cell generations in vitro, more than 21 days in vivo cell tracking post-transplantation

### Available solutions to allow full spectrum imaging (visible to NIR-II)

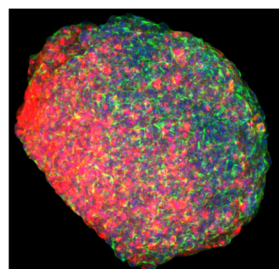


### Tracking of adipose-derived stem cells (ADSCs) in vivo at single-cell resolution with Cellaris 670



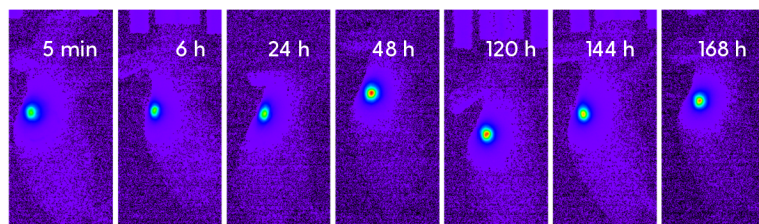
Tracking of ADSCs in vivo at single-cell resolution of mice ischemic hind limb post administration with confocal microscope and in vivo imaging system for up to 42 days.

### Long-term spheroid growth studies through bottoms-up staining method with Cellaris 670

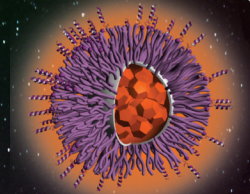


TCP-1 cells were initially labelled with Cellaris 670 (Red) before growing into a spheroid, incubated for 144 hours, and subsequently fixed and stained with Phalloidin AF488 (Green) and Hoechst (Blue). Imaged taken with Prospective Instruments multi-photon microscope. (Yasemin Geiger and Dr. Stefanie Sudhop)

### Tumour monitoring using NIR-II with Cellaris 1010



CT26 pre-labelled with Cellaris 1010 are monitored in vivo over 7 days using a full spectrum in vivo animal imaging system. (AniView Phoenix100, BLT)



### Cell labelling kits

product name	Ex (nm)	product code	configuration				
			kit volume			surface	
			(μL) code			code	description
Cellaris 470 (Blue)	355	LCTC-470	100	250	500	01	CPP
Cellaris 506 (Cyan)	355	LCTC-506					
Cellaris 540 (Green)	423	LCTC-540					
Cellaris 670 (Red)	506	LCTC-670					
Cellaris 810 (NIR-I)	635	LCTC-810					
Cellaris 1010 (NIR-II)	725	LCTC-1010					

### Notes

1. Product names correspond to their respective emission wavelengths (nm) in water.
2. Excitation (Ex) maxima are listed separately. Spectral profile available upon request.
3. Kit volumes of 100-, 250- and 500-μL are typically suitable for 20, 50, and 100 test respectively.
4. Nanoparticle surfaces are PEGylated, and surface conjugated with cell-penetrating peptides (CPP) for enhanced cell uptake. Other surface chemistries are available upon request.
5. Products listed above are for research use only (RUO). Not for diagnostic use.
6. Get in touch with our experts for customised product request.

Learn more  
about Cellaris

