

# NEO-STEM™

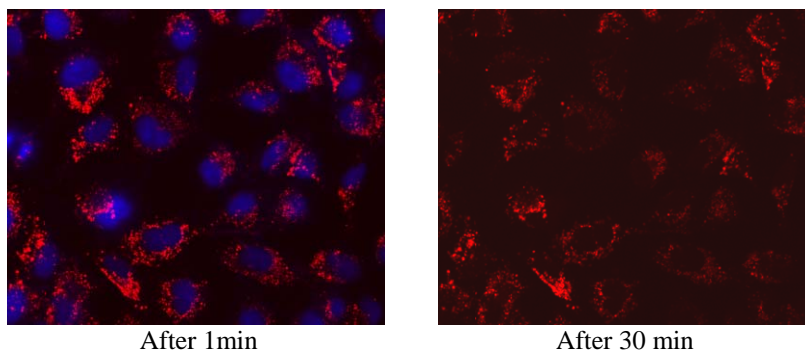
Fluorescent Magnetic Nanoparticle for a Cell Tracking



Table 1. Contents and Storage information

Material	Wavelength	Concentration	Storage
NEO-STEM™ TSF, TMSF	Ex/Em = 491/515 nm	2 mg/ml in borate buffer,	2-6 °C <b>Do not freeze or dry</b>
NEO-STEM™ TSR, TMSR	Ex/Em = 558/581 nm		
NEO-STEM™ TSN, TMSN	Ex/Em = 595/615 nm		

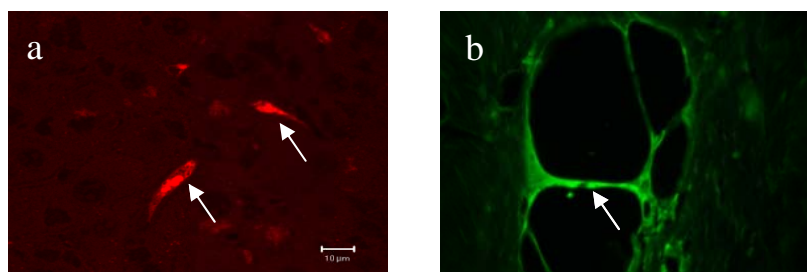
## Photo stability



**Figure 1 Photo stability of NEO-STEM™**

A549 cells labeled with both NEO-STEM™ and DAPI, was exposure under UV for 30 min. In contrast of DAPI, NEO-STEM™ shows a strong fluorescent signal (Red : NEO-STEM™, Blue : DAPI)

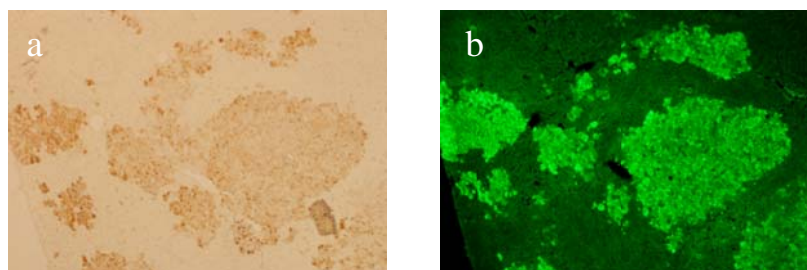
## Long term cell tracking



**Figure 2. Long term cell tracking**

a) hMSC labeled with NEO-STEM™ was detected in liver tissue after 7days.  
b) Bone marrow derived stem cells labeled with NEO-STEM™ was detected in fracture site. We can also detect stem cells differentiated into osteoblast. You can observe cell migration, metastasis and differentiation by using NEO-STEM™

## Conjugation with various biomolecules



**Figure 3. NEO-STEM™ conjugated with G-STP antibody**

a) Positive control (DAB staining)  
b) Immunohistochemistry image by NEO-STEM™ conjugated with G-STP antibody  
NEO-STEM™ could be used in a number of biomedical applications such as targeting, bioimaging, cell sorting, and drug delivery.

For more information please contact  
Tel.: +82-2-792-3785, Fax: +82-2-792-3779  
E-mail: info@biterials.com



BITERIALS  
Nano Bio Frontier