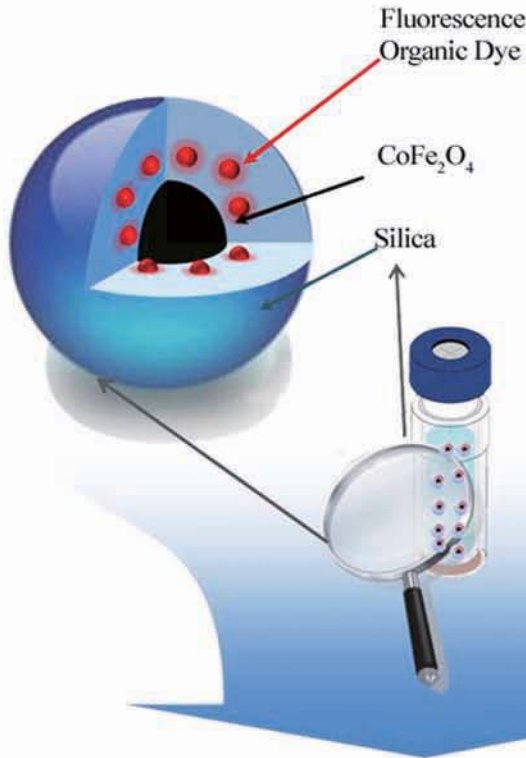


강력한 형광! 놀라운 특과력!

심부 장기 세포까지 추적하는

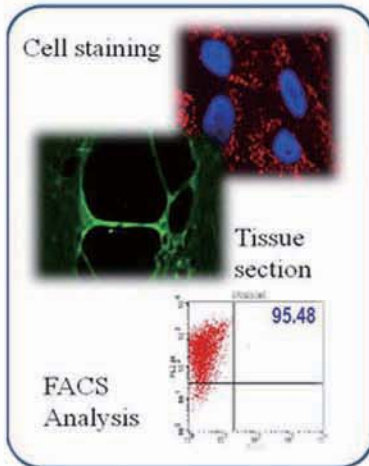
Biterials Nanoparticle!



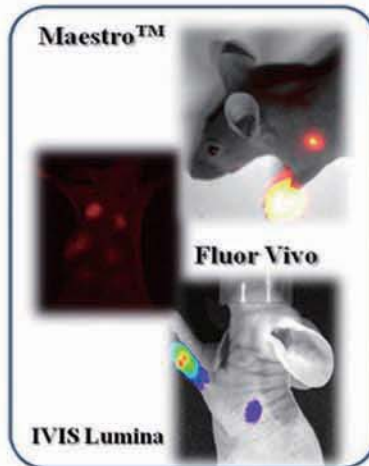
NEO-STEM™
Fluorescent Magnetic Nanoparticle

NEO-LIVE™
Innovative in vivo imaging probe

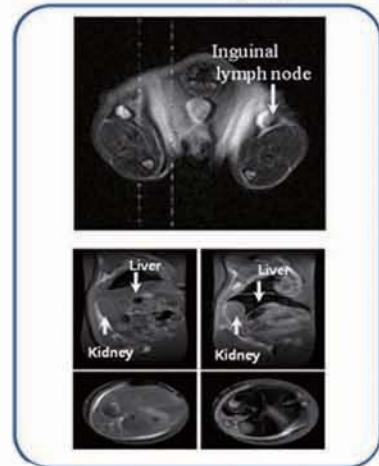
Cell Tracking



Live imaging



MRI imaging



in vivo LIVE Imaging & Cell Tracking

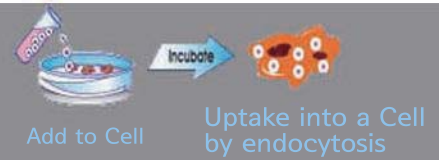
이제 어렵게 생각하지 마세요!

Reagent 의 중요성!

실험 방법은 간단, 결과는 surprise

특장점

1. 간편한 사용 방법 -> One step Procedure
2. 세포 무독성
3. 형광 이미지 + MRI 결과 동시 -> Neo-Live 제품
4. 오랜 형광 지속력
5. Customer 제작 서비스 -> COOH-, PEG, NH₂ 등 다양한 biomolecules 처리 가능



특징

1. Photostability (*in vitro data*)

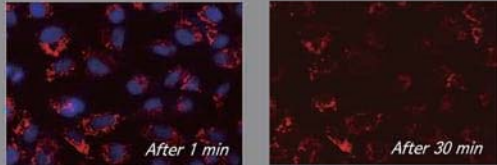


Fig 1. Neo-STEM으로 염색된 A549 cell
30분 간 UV 노출에도 형광 유지
Red: Neo-Stem; Blue: DAPI

2. Long term Cell Tracking

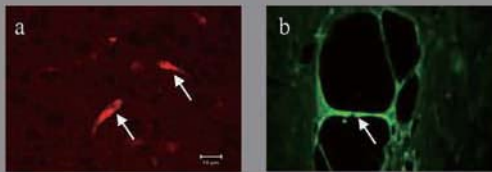


Fig 2. Neo-STEM으로 염색된 hMSC
in vivo 주입 7일 후 간조직에서도 관찰
타사에 비해 장기간 세포추적 가능

3. Conjugation with various biomolecules

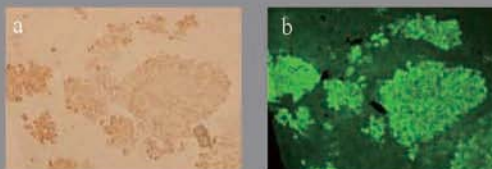


Fig 3. a) positive control,
b) Neo-STEM과 conjugated된 G-STP
Ab의 IHC 결과
원하는 molecule과도 결합 가능 확인
Targeting, Cell sorting, Drug Delivery 사용 가능

4. High Sensitivity in small cell number (*in vivo live image*)

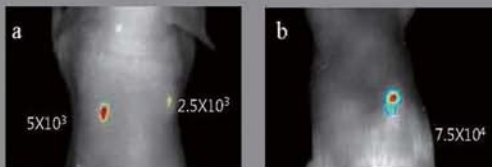


Fig 4. Neo-Live로 염색된 Cell 관찰
a) 2.5x10³의 적은 양으로도 피하조직에서 관찰 가능
b) 긴 조직에서도 7.5x10⁴ 정도의 관찰이 가능

5. Deep tissue imaging (*in vivo live image*)

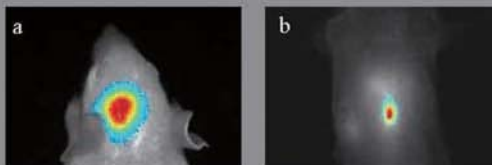


Fig 5. Neo-Live로 염색된 Cell 의 심부장기에서의 관찰
a) brain
b) spinal cord

6. Long term *in vivo* Cell Tracking (*in vivo live image*)

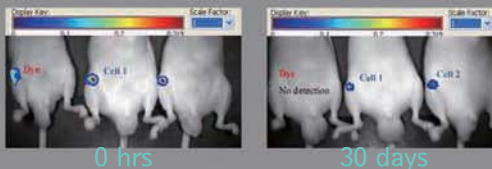


Fig 6. Neo-Live로 염색된 chondrocyte cell 관찰
articular capsule에 injury를 준 mouse
30일이 지난 후에도 관찰 가능

7. MRI (*in vivo live image*)

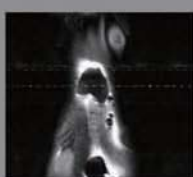


Fig 7. Neo-STEM(TMSR)의 MRI Live image
Neo-STEM으로 염색된 A549 Cell
mouse subcutaneous에 injection 한 후의 결과