

면역-종양 신약효능평가 지원

면역-종양분야 전문가들이 신약개발을 가이드 해드립니다.







SLS Bio

면역-종양 신약효능평가
서비스만의 강점



클라이언트 맞춤형
실험 설계

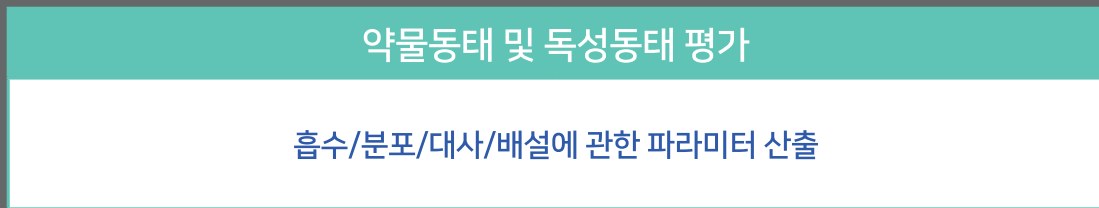
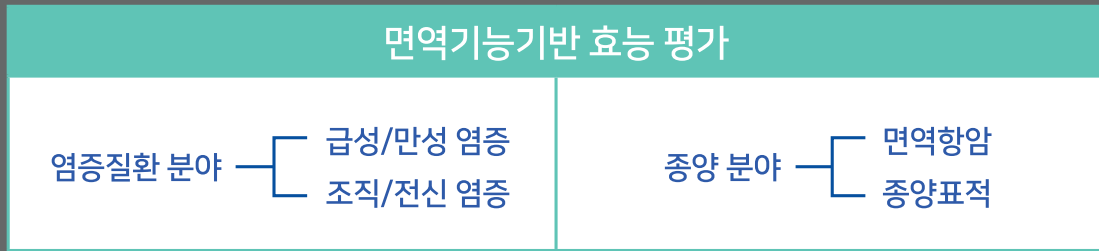
신뢰도 높은
실험 결과

결과 분석 및
컨설팅

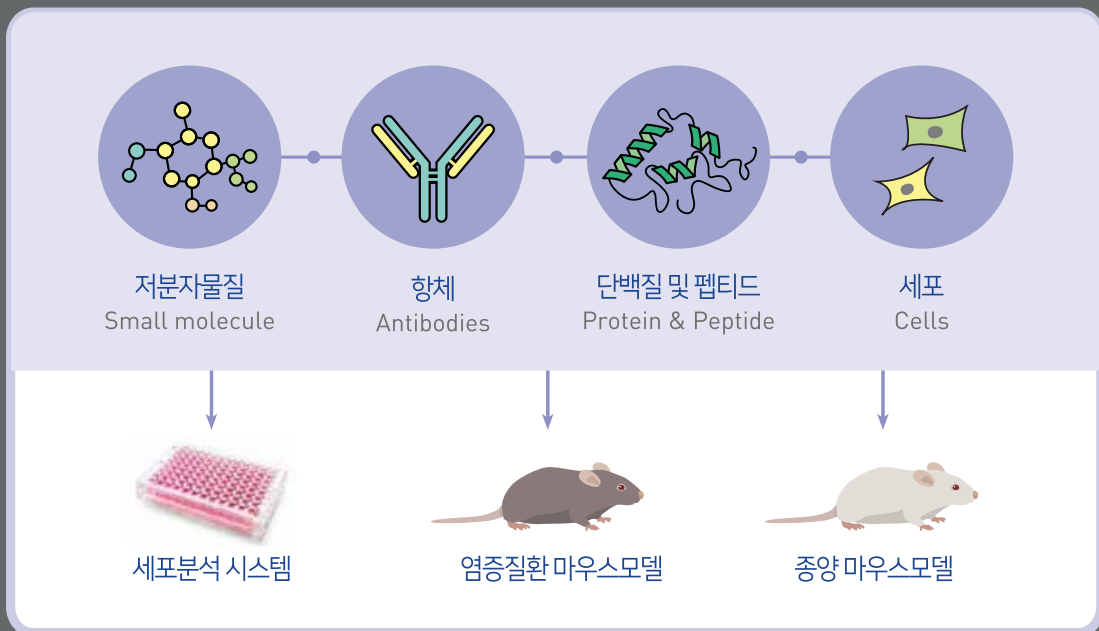
기전 규명 실험

이제 **SLSBio**가
제공해 드리겠습니다.

☑ 서비스 분야



☑ 서비스 내용



- 효능평가
- 기전규명(MOA)
- 효능예측 바이오마커 발굴

☑ 효능평가 서비스 플랫폼

In vitro 효능평가

- T cell function
- Monocyte/macrophage
- Parenchymal cells

In vivo 염증질환 효능평가

- EAE (자가면역뇌척수염)
- IBD (염증성장질환)
- CIA (류마티스관절염)
- GVHD (이식편대숙주질환)

In vivo 항-종양 효능평가

- Melanoma tumor model
- Breast tumor model
- Xenogenic mouse tumor model

In vitro 효능평가

T cell

활성

- » IL-2 production

증식

- » BrdU incorporation
& CFSE dilution

분화

- » Th1 (IFN- γ + T-bet)
- » Th2 (IL-4 + GATA-3)
- » Th17 (IL-17A + ROR γ T)
- » Treg (IL-10 + Foxp3)

Macrophage

활성

- » Maturation phenotyping

분화

- » M1 (MHC-II^{high}, TNF- α , CCR-7)
- » M2 (CD206, Arg-1, CCL-22)

Myofibroblast

활성

- » α -SMA expression
- » Collagen I expression

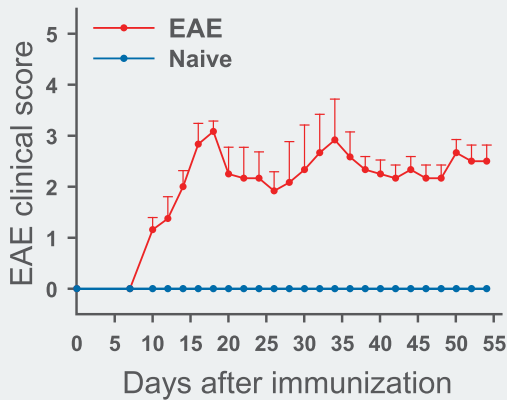
염증질환 효능평가 플랫폼-1 : EAE(자가면역 뇌척수염) 모델

효능평가 서비스 적용 대상

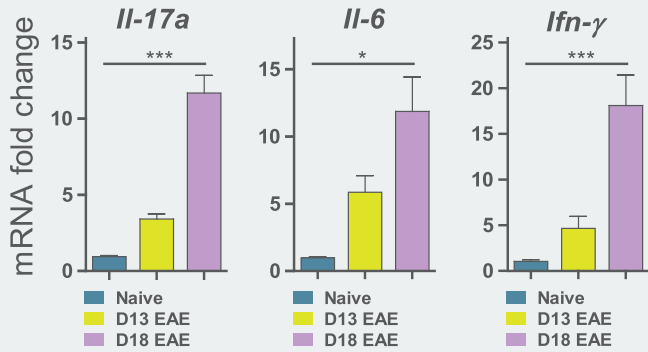
- 중추신경계 염증질환 표적 약물
- 면역세포 조직 이동/침투 표적 약물
- Th17/Treg 밸런스 표적 약물
- Microglia/Astrocyte 표적 약물

질병유도/약물투여/중증도 평가

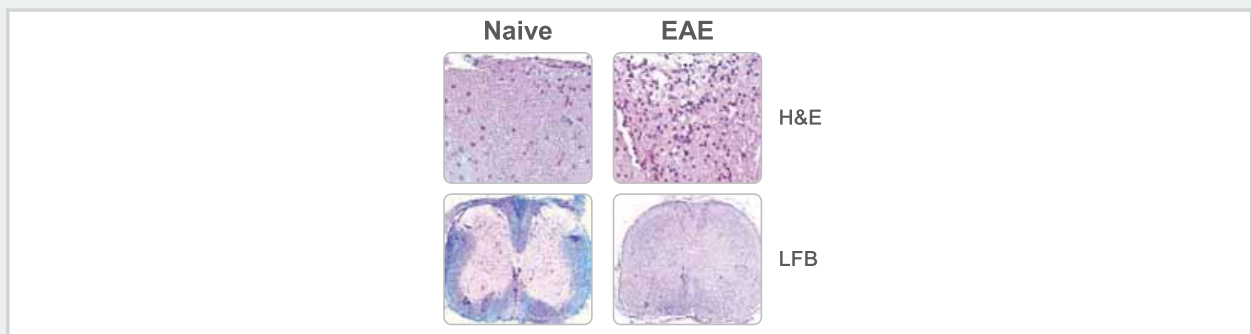
* MOG peptide → C57BL/6



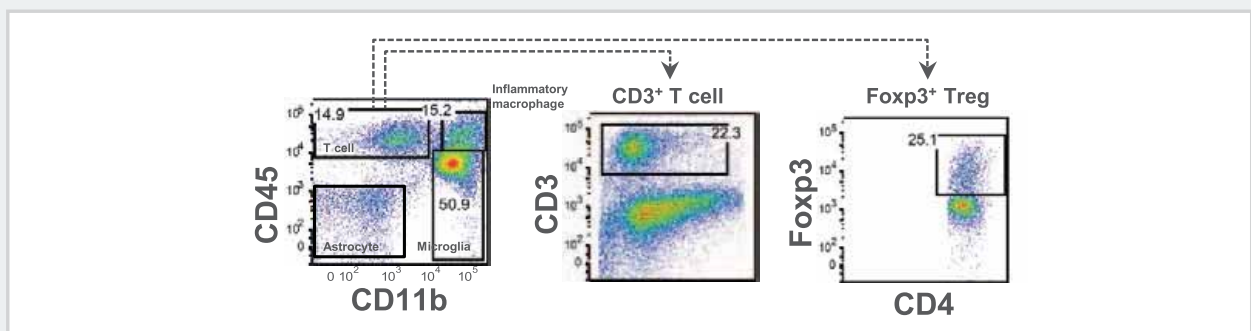
조직염증인자 프로파일링



조직병리평가



염증조직 면역세포 프로파일링



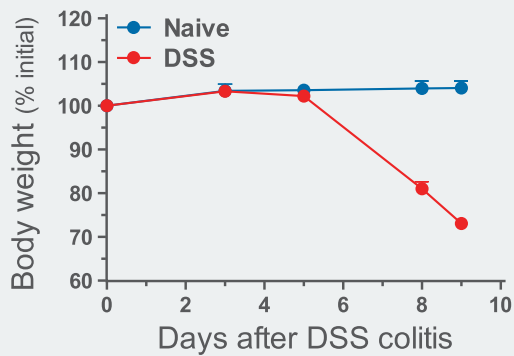
염증질환 효능평가 플랫폼-2 : IBD(염증성 장질환) 모델

효능평가 서비스 적용 대상

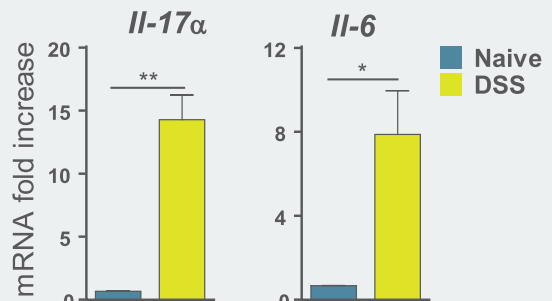
- 소화기 염증질환(Crohn's disease, ulcerative colitis) 표적 약물
- 선천면역세포 표적 약물
- Th1/Th17/Treg 밸런스 표적 약물
- 장상피세포 표적 약물

질병유도/약물투여/중증도 평가

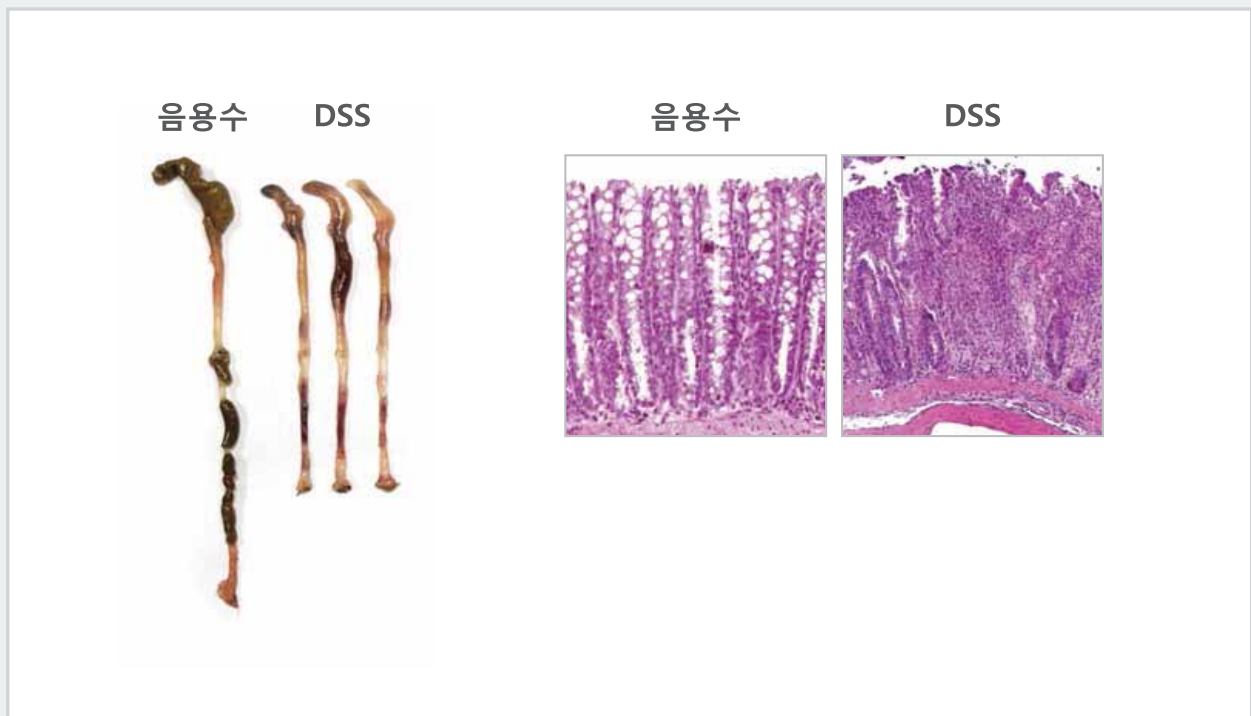
* DSS (1.0-2.0%) → C57BL/6



조직염증인자 프로파일링



조직병리평가



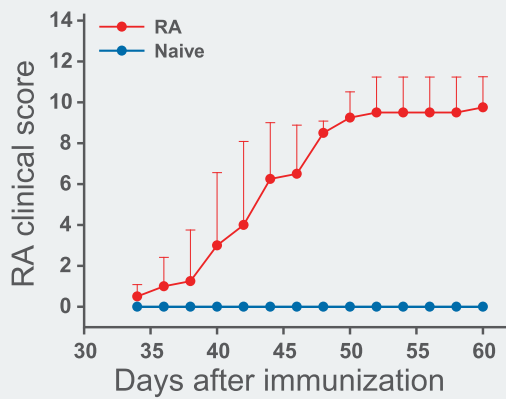
염증질환 효능평가 플랫폼-3 : CIA(류마티스관절염)모델

효능평가 서비스 적용 대상

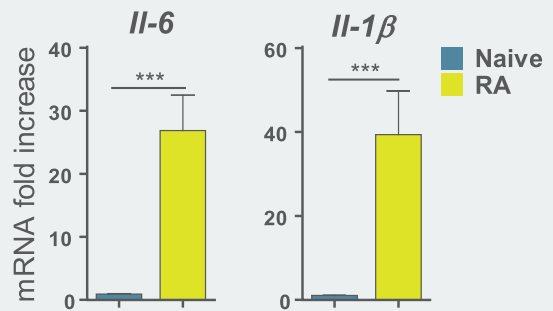
- 류마티스관절염 표적 약물
- 전신/조직 염증반응 표적 약물
- 선천면역 표적 약물
- Th1/Th2/Th17/Treg 밸런스 표적 약물

질병유도/약물투여/중증도 평가

* Bovine Type II Collagen → DBA1

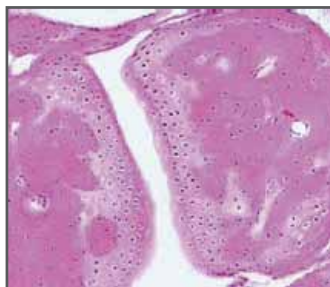


조직염증인자 프로파일링

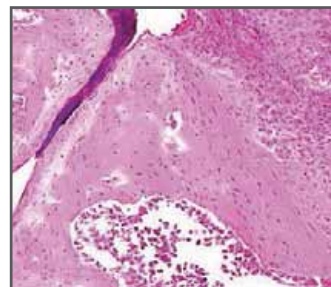


조직병리평가

Naive



RA



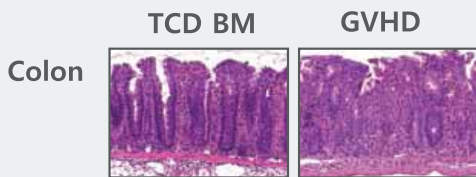
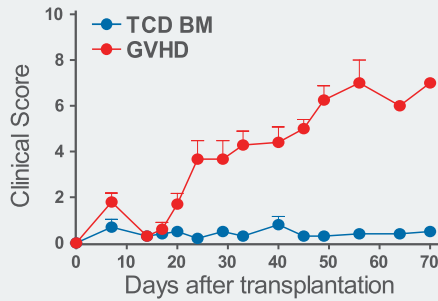
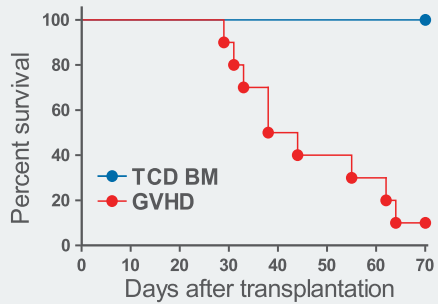
염증질환 효능평가 플랫폼-4 : GVHD(이식편대숙주질환) 모델

효능평가 서비스 적용 대상

- 동종이식면역반응 표적 약물
- 전신염증반응 표적 약물
- Th1/Th2/Th17 표적 약물
- 장/폐-상피세포 표적 약물

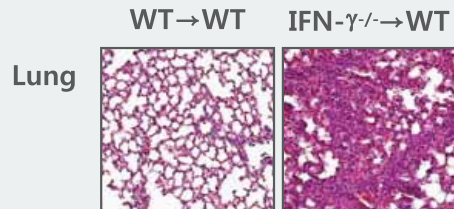
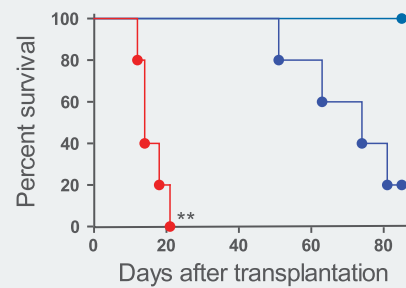
장-GVHD 마우스모델 : Th1-매개 염증조건

* BA1*B6 (H-2^b) → BDF1 (H-2^{b/d})

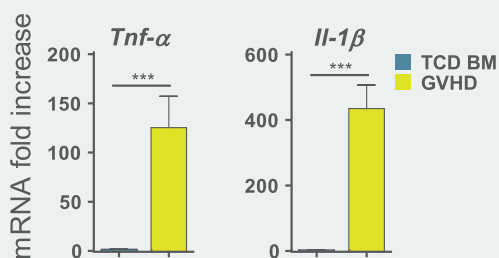


폐-GVHD 마우스모델 : Th2/Th17-매개 염증조건

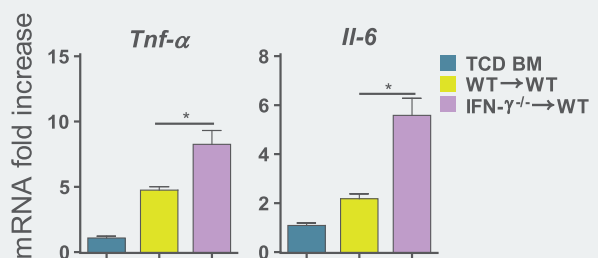
* BALB/c IFN- γ ^{-/-} (H-2^d) → B6 (H-2^b)



조직염증인자 프로파일링

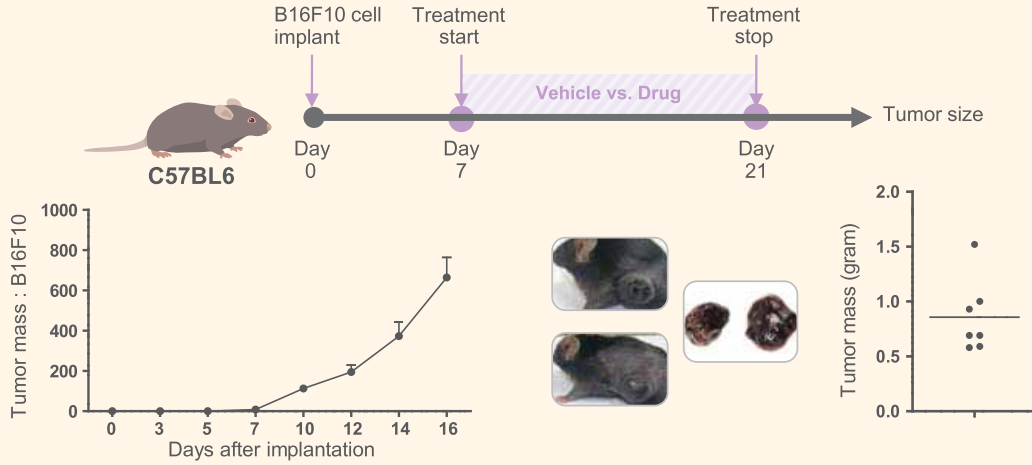


조직염증인자 프로파일링

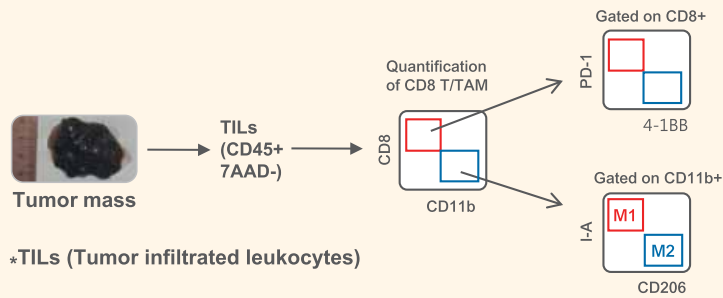


항-종양 효능평가 플랫폼-1 : B16F10 melanoma tumor 모델

종양유도/약물투여/효능평가

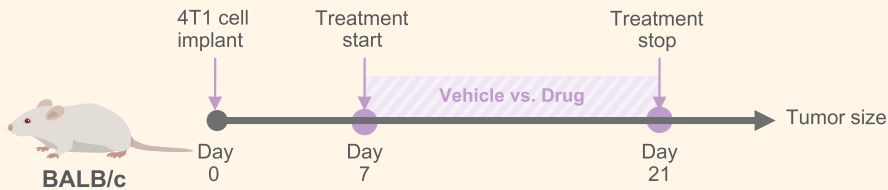


종양조직 면역세포 프로파일링

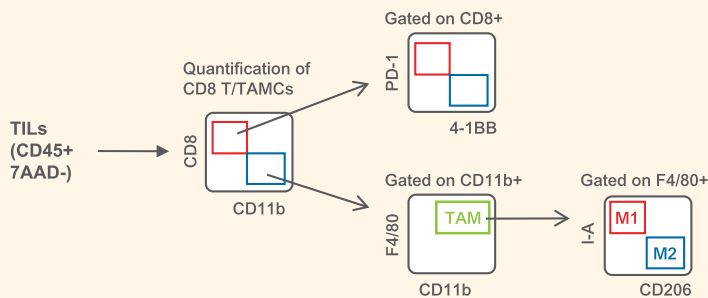


항-종양 효능평가 플랫폼-2 : 4T1 breast tumor 모델

종양유도/약물투여/효능평가

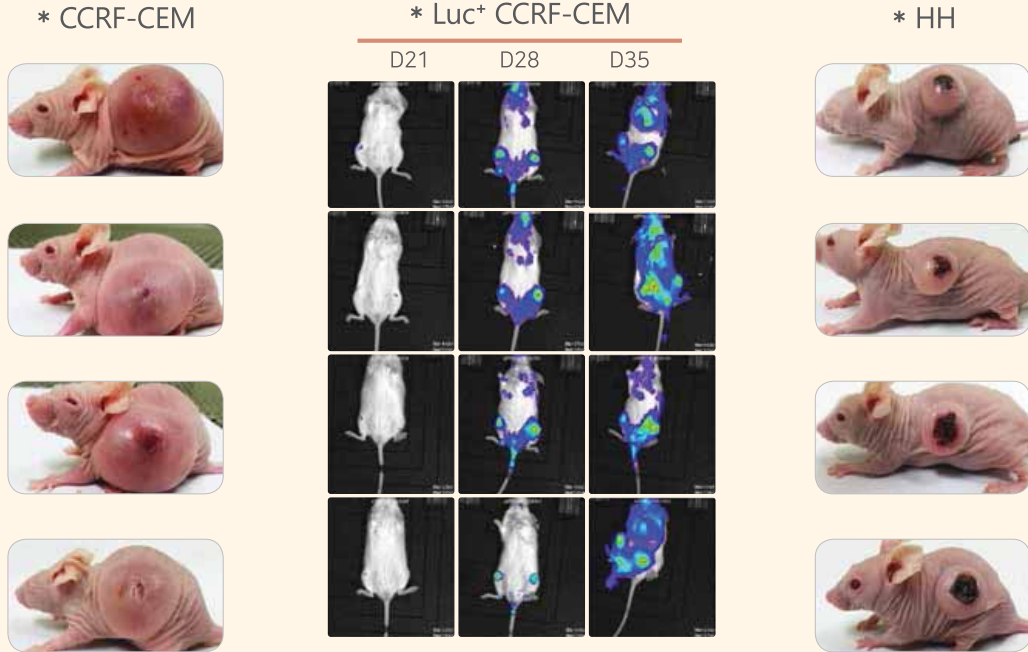


종양조직 면역세포 프로파일링



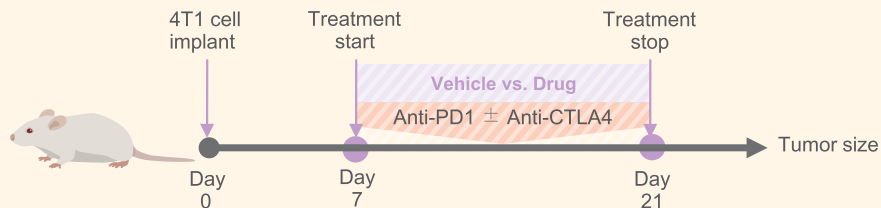
항-종양 효능평가 플랫폼-3 : Xenogeneic mouse tumor 모델

인간 종양세포주 → nude/SCID



항-종양 효능평가 플랫폼-4 : Checkpoint blockade 병합모델

종양유도/약물투여/효능평가



종양조직 면역세포 프로파일링

