

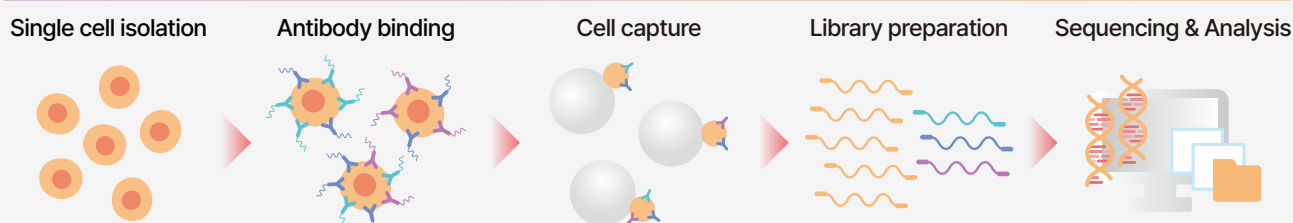
CITE-seq

Single Cell RNA Sequencing with Protein Profiling

Service Information

CITE-seq(Cellular Indexing of Transcriptomes and Epitopes by Sequencing)은 전사체 정보와 단백질 프로파일링을 함께 분석하는 멀티오믹스 차원의 단일 세포 분석 기술입니다. Antibody-oligo를 사용하는 NGS 기반의 정성적 및 정량적 단백질 프로파일링이 scRNA-seq과 함께 이루어집니다. 면역 세포 분석, 종양 미세환경 연구 등 세포 단백질 마커 확인을 통해 정밀한 세포 분화 규명이 필요한 분야에 최적화된 솔루션입니다. 연구 목적에 알맞는 세포 타입에 대한 antibody를 직접 선택하여 CITE-seq을 진행해보세요.

Workflow



Data Exploration

scRNA-seq based cell type annotation + Protein expression profiling

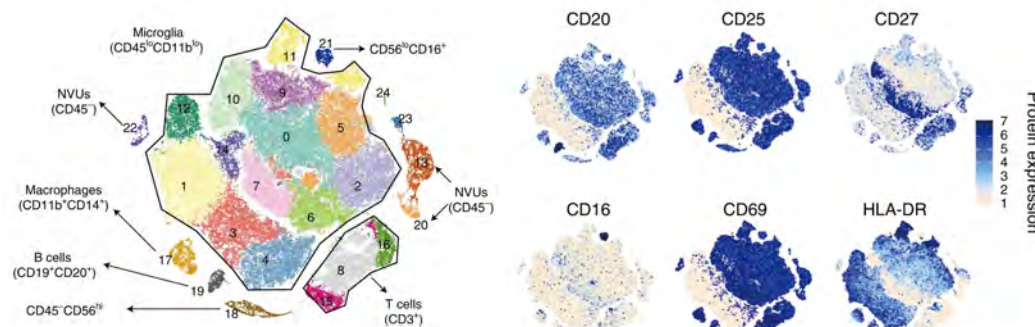
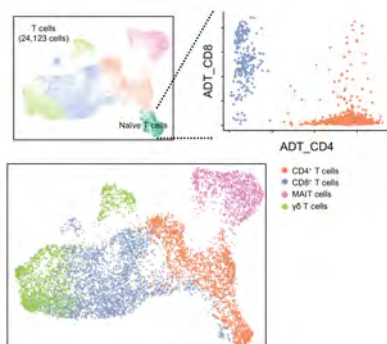


Figure adapted from Kumar P et al., Nature Neuroscience (2022).

T cell differentiation



Comparment of protein expression and RNA expression

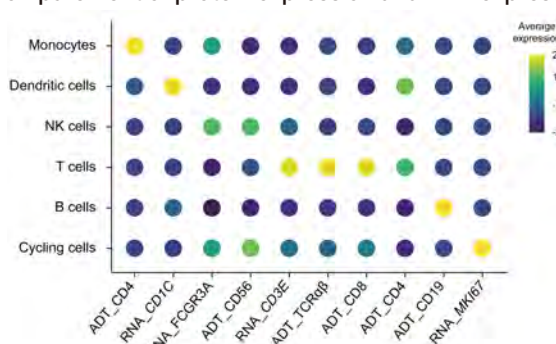


Figure adapted from Koh et al., J Hepatol (2022).

10x Genomics scRNA-seq Platform

		BioLegend TotalSeq-B	BioLegend TotalSeq-C
scRNA-seq compatibility		3' Gene Expression Flex Gene Expression (singleplex only)	5' Gene Expression Flex Gene Expression
Specificity		Human 392 targets Mouse 249 targets	Human 428 targets Mouse 280 targets
Intracellular protein labeling		Human 34 targets Mouse 7 targets	Human 25 targets Mouse 4 targets
Human	Universal Cocktail	Wide spectrum of immune and hematopoietic cell types, 140 markers	Wide spectrum of both innate and adaptive immune cells, 137 markers
	Essential Cocktail	-	Principal and sub-lineage immune cell types, 109 markers
	TBNK Cocktail	T, B, NK, and NKT cell identification, 9 markers	
Mouse	Universal Cocktail	Wide spectrum of immune and hematopoietic cell types, 102 markers	Wide spectrum of both innate and adaptive immune cells, 122 markers
	Myeloid Cocktail	Comprehensive profiling of myeloid cell populations, 84 markers	-
Multiplexing compatibility		TotalSeq Hashtag Antibody (human, mouse)	

BD Biosciences scRNA-seq Platform

		BD AbSeq Antibody-Oligos
Specificity		Human 270 targets, Mouse 217 targets
Intracellular protein labeling		Human 11 targets, Mouse 7 targets
Human	Adaptive Protein Panel	Adaptive immune cell populations including T cells and B cells, 59 markers
	B-Cell Protein Panel	Profiling of B cell populations, 30 markers
	T-Cell Protein Panel	Profiling of T cell populations, 30 markers
	Immune Profiler Panel	Immune cell and antigen-presenting cell populations, 30 markers
Multiplexing compatibility		Single Cell Multiplexing Kit (human, mouse)

(주)로킷제노믹스

ROKIT Genomics Inc.

☎ 1644-7203

✉ genomics@rokit.co.kr

🔗 www.rokitgenomics.com

📍 서울특별시 금천구 디지털로10길 9, 12층

12F, 9, Digital-ro 10-gil, Geumcheon-gu, Seoul, 08514, Republic of Korea