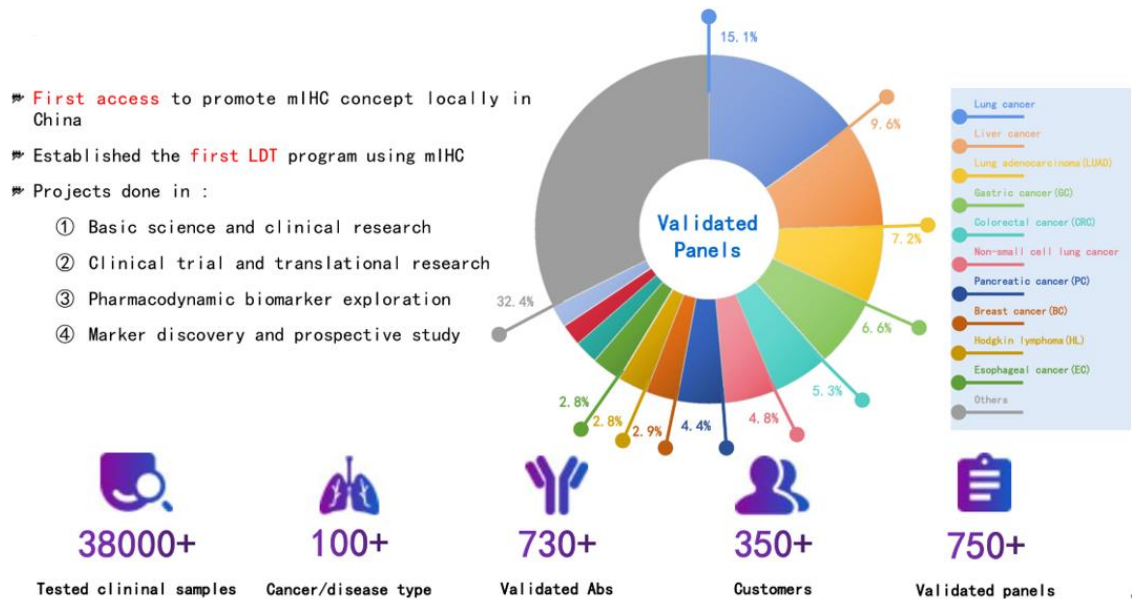


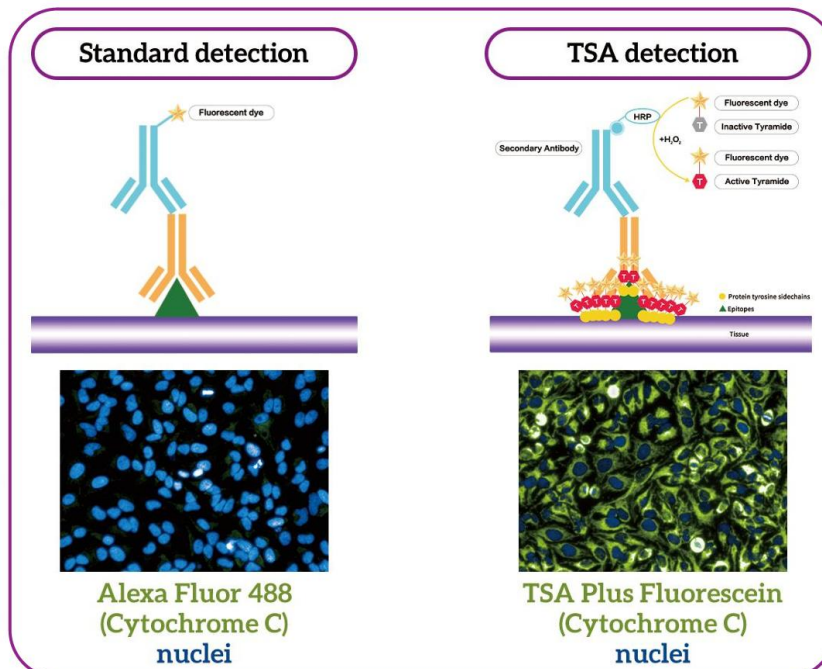
Multiplex IHC (mIHC) kit Introduction

1. Profile



2. Technology

Tyramide Signal Amplification (TSA) technology



3. Key Features

Key Features	
☒	Signal amplification by 10-1000 times
☒	Compatible with species-specific antibodies
☒	Applications in Research and Translational purpose
☒	Three to up to nine fluorophores for simultaneous detections
☒	Independent Intellectual Property Rights
☒	Professional Operational Training Service

4. Product list

1) mIHC Kit

Part Number	Antigen Retrieval Solution	Item	Specification (slide)	Fluorophore	Secondary Antibody (Included or not)
AXT37100011	For FFPE samples Suitable for manual staining With Antigen Retrieval Solution (50X)	7-Color mIHC Kit (Applicable to MSI)	100	520 540 570 620 650 690 DAPI	Included
AXT37100031		7-Color mIHC Kit (Applicable to WSI)	100	480 520 570 620 690 780 DAPI	
AXT36100011		6-Color mIHC Kit (Applicable to MSI)	100	520 570 620 650 690 DAPI	
AXT36100031		6-Color mIHC Kit (Applicable to WSI)	100	480 520 570 620 690 DAPI	
AXT35100011		5-Color mIHC Kit	100	520 570 620 690 DAPI	
AXT34100011		4-Color mIHC Kit	100	520 570 690 DAPI	
AXT37050011F	For Fixed / fresh Frozen samples Suitable for manual staining with AbEraser®	7-Color mIHC Kit (Applicable to MSI)	50	520 540 570 620 650 690 DAPI	Included
AXT37050031F		7-Color mIHC Kit (Applicable to WSI)	50	480 520 570 620 690 780 DAPI	
AXT36050011F		6-Color mIHC Kit (Applicable to MSI)	50	520 570 620 650 690 DAPI	
AXT36050031F		6-Color mIHC Kit (Applicable to WSI)	50	480 520 570 620 690 DAPI	
AXT35050011F		5-Color mIHC Kit	50	520 570 620 690 DAPI	
AXT34050011F		4-Color mIHC Kit	50	520 570 690 DAPI	
AXT37100021	For FFPE samples Suitable for automatic staining With Antigen Retrieval Solution (50X)	7-Color Automation mIHC Kit (Applicable to MSI)	100	520 540 570 620 650 690 DAPI	Included
AXT37100020					Not included
AXT37100041		7-Color Automation mIHC Kit (Applicable to WSI)	100	480 520 570 620 690 780 DAPI	Included
AXT37100040					Not included
AXT36100021		6-Color Automation mIHC Kit (Applicable to MSI)	100	520 570 620 650 690 DAPI	Included
AXT36100020					Not included
AXT36100041		6-Color Automation mIHC Kit (Applicable to WSI)	100	480 520 570 620 690 DAPI	Included
AXT36100040					Not included

2) Required reagents

Part Number	Item	Specification
AXT9510000	HRP labeled Goat anti mouse/rabbit polymer (3X)	93ml
AXT94100001	XTSA®Antigen Retrieval Solution (50X,PH6)	200ml
AXT94100002	XTSA®Antigen Retrieval Solution for Automation (PH9)	200ml
AXT94100003	XTSA®Antigen Retrieval Solution for Automation (PH6)	200ml
AXT9710000	AbEraser®Antibody Stripping Solution	100ml
AXTP212	Dewax Solution	1000ml
AXTP215	Wash Buffer (20X)	1000ml
AXTP217	Antigen Retrieval Solution2	1000ml
AXTP218	Antigen Retrieval Solution1	1000ml
AXTP220	Incubate cover slip	48 sheets/set

3) Antibody

Part Number	Item	Specification (ml/bottle)
AXB1010-12	CD21	12
AXB3015-12	CD8	12
AXB1012-12	PD1	12
AXB1013-12	CD23	12
AXB1014-12	CD3	12
AXB1015-12	PD-L1	12
AXB3010-12	CD68	12
AXB3011-12	CD56	12
AXB3012-12	PANCK	12
AXB3013-12	KI67	12
AXB3014-12	CD20	12

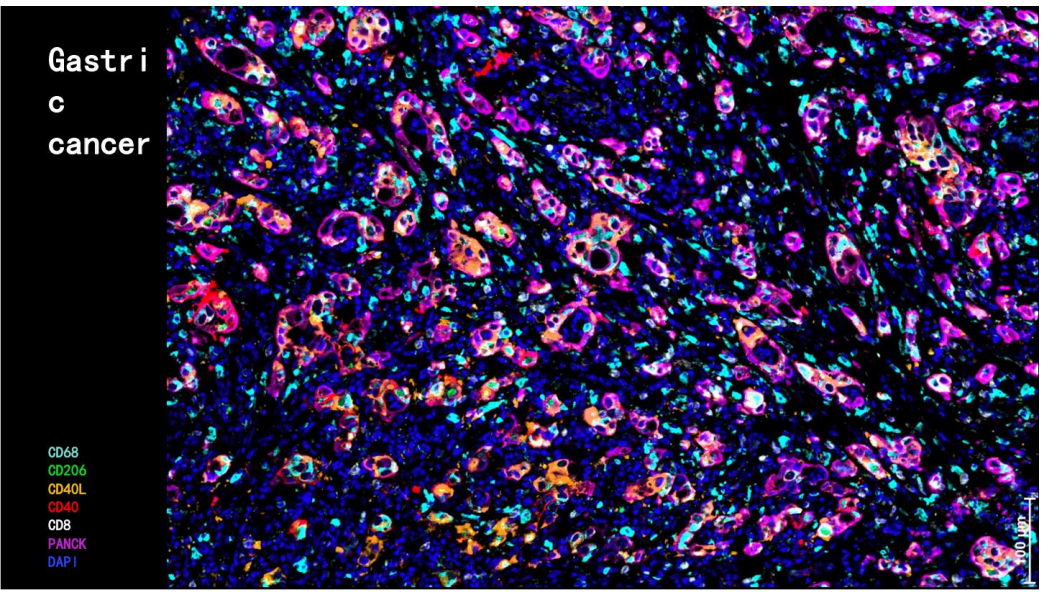
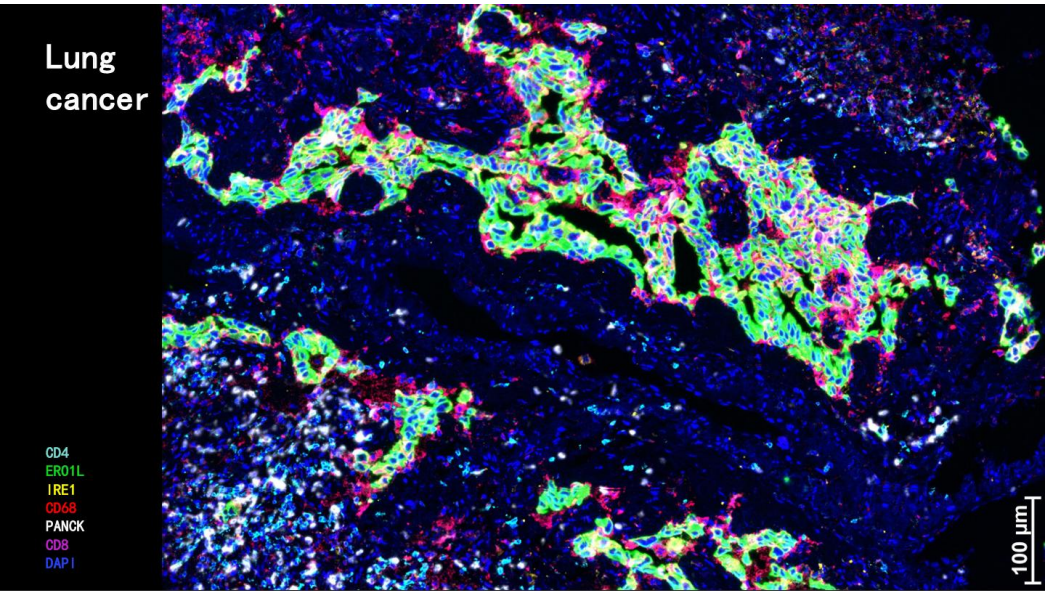
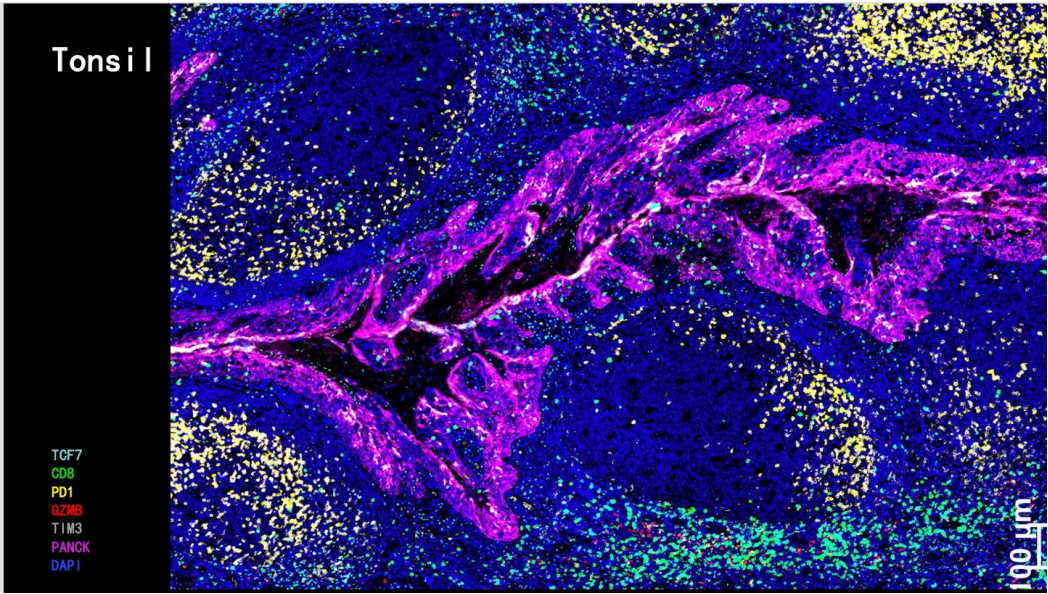
4) Antibody Stripping solution

Part Number	Specification (ml/bottle)
AXT9710000	100
AXT9705000	50
AXT9703000	30
AXT9701500	15

5) Fluorophore Excitation/Emission Maxima and Park

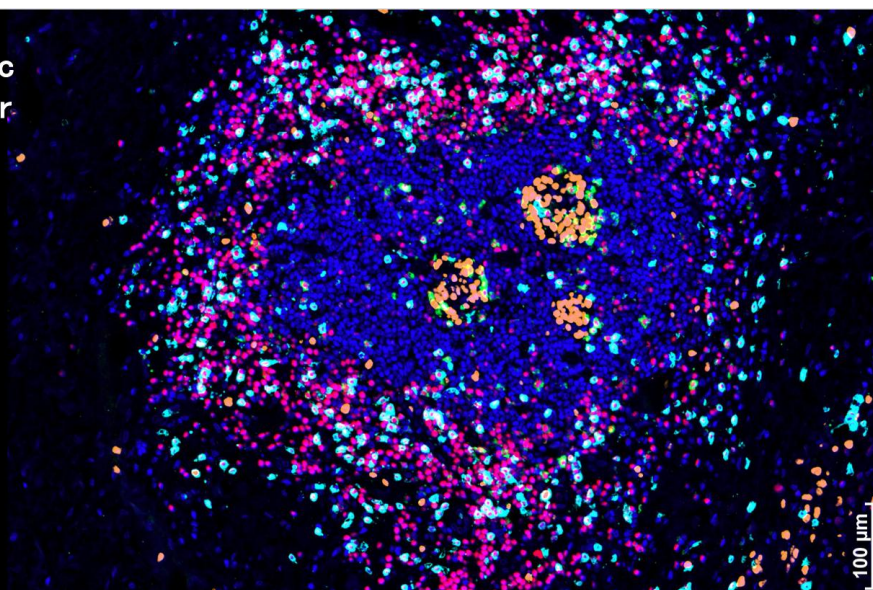


Part Number	Fluorophore	Specification	Excitation(nm)	Emission(nm)	Cap Color
AXT9110000	DAPI	1.5ml	358	461	Blue
AXT6110000	XTSA 480	100slide	436	485	Purple
AXT6210000	XTSA 520	100slide	494	525	Green
AXT6310000	XTSA 540	100slide	523	548	Yellow
AXT6410000	XTSA 570	100slide	550	570	Red
AXT6510000	XTSA 620	100slide	595	620	Brown
AXT6610000	XTSA 650	100slide	627	650	Orange
AXT9910000	XTSA 690	100slide	676	694	White
AXT6710000	XTSA 780*	100slide	743	767	Pink



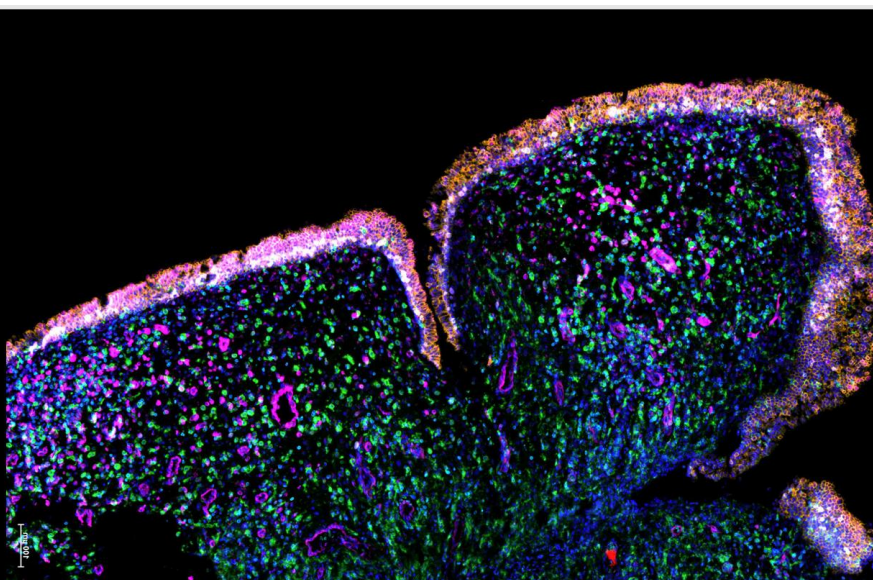
Gastric cancer

CD8
PD1
Ki67
TCF7
DAPI



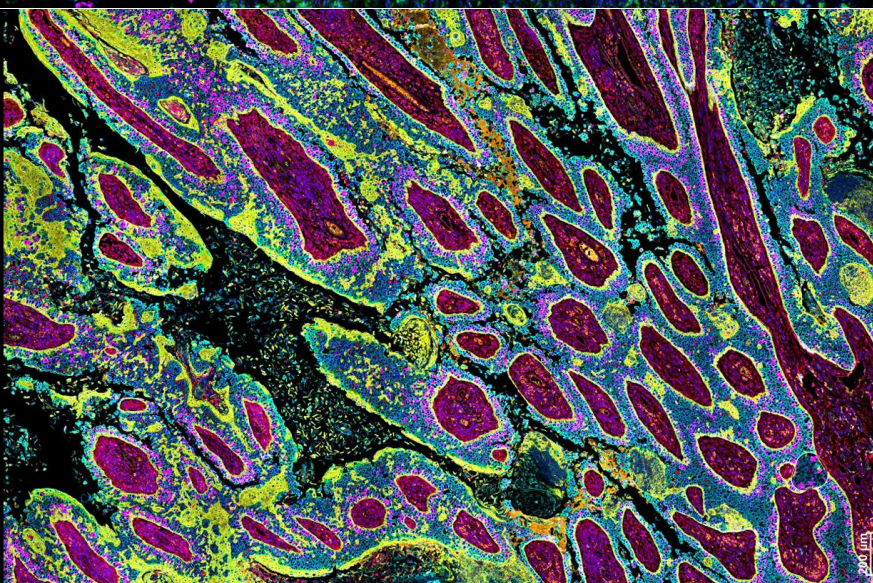
Nasal polyp

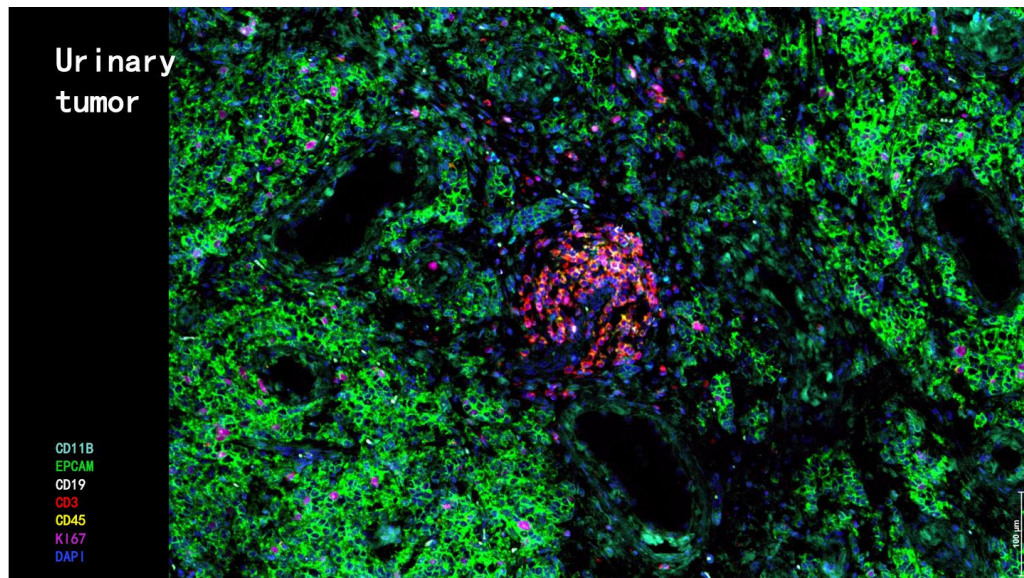
CD43
CD163
E-cad
TGF-β
Ki67
CD31
DAPI



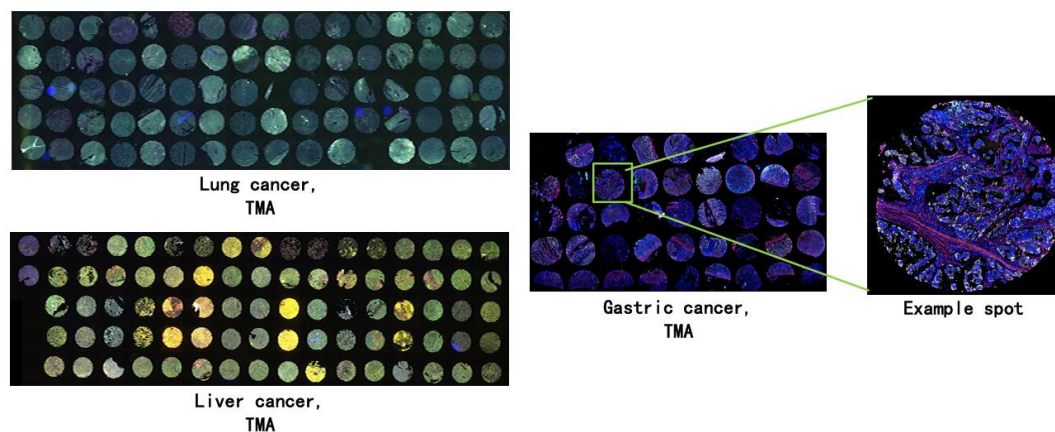
Skin cancer

CK13
MUC5AC
IGKC
CK7
CK14
VIM
DAPI





Stained TMA images



5. Publicaitons

Many publications featuring this platform (partial)

- Xue, R., Zhang, Q., Gao, Q. et al. Liver tumour immune microenvironment subtypes and neutrophil heterogeneity. *Nature* 612, 141–147 (2022). [IF=64.6 Nature](#)
- Wang Z, Liu C, Zheng S, et al. Molecular subtypes of neuroendocrine carcinomas: A cross-tissue classification framework based on five transcriptional regulators[J]. *Cancer Cell*. 2024; DOI: 10.1016/j.ccell.2024.05.002 [IF=50.3 Cancer Cell](#)
- Liu H, Gao J, Feng M, et al. Integrative molecular and spatial analysis reveals evolutionary dynamics and tumor-immune interplay of in situ and invasive acral melanoma. *Cancer Cell*. Published online May 9, 2024. doi:10.1016/j.ccell.2024.04.012 [IF=50.3 Cancer Cell](#)
- Yang Z, Gao J, Zheng J, et al. Efficacy and safety of PD-1 blockade plus long-course chemoradiotherapy in locally advanced rectal cancer (NECTAR): a multi-center phase 2 study. *Signal Transduct Target Ther*. 2024;9(1):56. Published 2024 Mar 11. [IF=39.3 Signal Transduction and Targeted Therapy](#)
- Liu W, Huang G, Liu B, et al. Single cell landscape of parietal epithelial cells in healthy and diseased states. *Kidney Int*. 2023; 104: 108-1231. April 23, 2023 [IF=19 Kidney Int](#)
- Xiong J, Dai YT, Wang WF, et al. GPCR signaling contributes to immune characteristics of microenvironment and process of EBV-induced lymphomagenesis. *Sci Bull (Beijing)*. 2023;68(21):2607-2619. doi:10.1016/j.scib.2023.09.029 [IF=18.9](#)
- Zhang TL, Xia C, Zheng BW, et al. Integrating single-cell and spatial transcriptomics reveals endoplasmic reticulum stress-related CAF subpopulations associated with chordoma progression. *Neuro Oncol*. Published online September 29, 2023. [IF=15.9 Neuro Oncol](#)
- Wang J, Huang Q, He K, et al. Presynaptic density determined by SV2A PET is closely associated with postsynaptic metabotropic glutamate receptor 5 availability and independent of amyloid pathology in early cognitive impairment. *Alzheimer's Dement*. 2024; 1-13. [IF=14 Alzheimers & Dementia](#)
- Jiang T, Jin Q, Wang J, et al. HLA-I evolutionary divergence confers response to PD-1 blockade plus chemotherapy in untreated advanced non-small-cell lung cancer[J]. *Clinical Cancer Research*. 2023. [IF=11.5 Cancer Research](#)
- Li C, Guo H, Zhai P, et al. Spatial and Single-Cell Transcriptomics Reveal a Cancer-Associated Fibroblast Subset in HNSCC That Restricts Infiltration and Antitumor Activity of CD8+ T Cells. *Cancer Res*. 2024;84(2):258-275. doi:10.1158/0008-5472.CAN-23-1448 [IF=11.2 Cancer Research](#)
- Wei G, Bolun Z, Zhenlin Y, et al. Integrating microarray-based spatial transcriptomics and single-cell RNA-sequencing reveals tissue architecture in esophageal squamous cell carcinoma. *eBioMedicine*. VOLUME 84, 104281 (2022). [IF=11.1 eBioMedicine](#)
- Wang Z, Zhen C, Guo X, et al. Landscape of gut mucosal immune cells showed gap of follicular or memory B cells into plasma cells in immunological non-responders[J]. *Clinical and Translational Medicine*. 2024, 14(5): e1699. [IF=10.6 Clinical and Translational Medicine](#)
- Chen C, Guo Q, Liu Y, et al. Single-cell and spatial transcriptomics reveal POSTN+ cancer-associated fibroblasts correlated with immune suppression and tumour progression in non-small cell lung cancer. *Clin Transl Med*. 2023;13:e1515. [IF=10.6 Clinical and Translational Medicine](#)
- Wang D, Huang L, Wu X, et al. Low-dose radiotherapy promotes the formation of tertiary lymphoid structures in lung adenocarcinoma[J]. *Frontiers in Immunology*. 2024, 14: 1334408. [IF=7.3 Frontiers in Immunology](#)