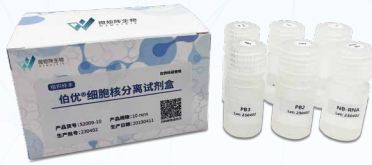


BioYou® Nuclei Isolation Kit



This kit is designed for isolating high-purity single nuclei from animal tissues. Tissues release intact nuclei through tissue homogenization, lysis of cell membranes and other procedures, while maintaining nuclear membrane stability and chromatin spatial structure. Optimized density gradient centrifugation or column-based techniques further remove cellular debris and other impurities, meeting the quality requirements for nuclei in downstream applications such as Single-cell Omics and Epigenetics. This product overcomes the limitations of traditional enzymatic digestion methods that rely on sample viability, making it widely applicable to both fresh and fresh frozen tissues, while remaining compatible with low-input samples (<10 mg). Featuring a streamlined workflow, this product delivers a standardized solution for complex biological samples.

Product List

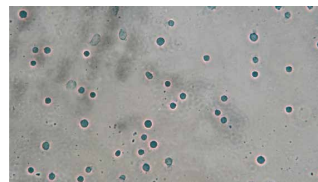
Catalog number	Kit Name	Sizes
52009-10	Bioyou® Nuclei Isolation Kit	10 rxns
52201-10	Bioyou® Nuclei Isolation Kit (Column)	10 rxns

Note: This product is for research use only.

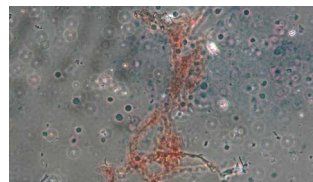
Applications

The single-nuclei suspensions can be used for nuclear transcriptomics (e.g., snRNA-seq/bulk RNA-seq) and epigenetics (e.g., scATAC-seq/bulk ATAC-seq, CUT&Tag) research etc.

Comparison with Competing Products

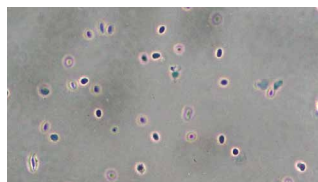


BioYou® Nuclei Isolation Kit

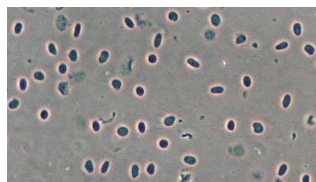


Competitor's Nuclei Isolation Kit

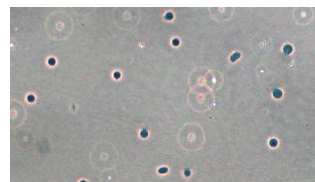
Nuclei Isolated from Different Tissues



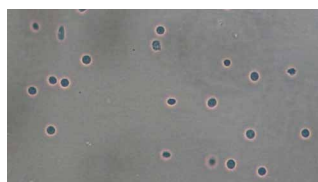
Human brain



Human lung cancer



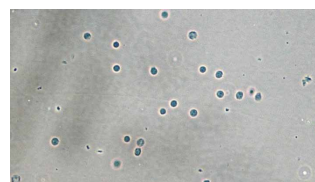
Human liver



Mouse brain



Mouse lung



Mouse liver

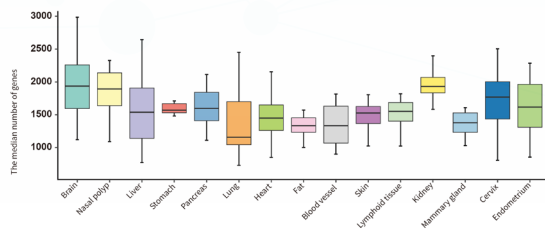


Application Examples

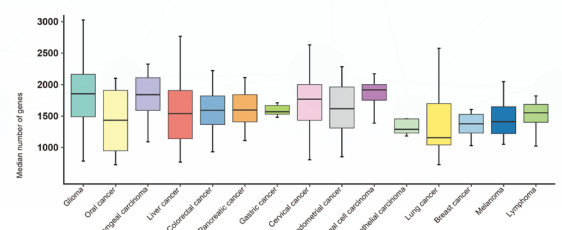
This kit has been successfully applied to nuclei isolation from nearly 20 species, including humans, mice, rats, and invertebrates such as scallops and sea anemones. It is compatible with over 200 tissue types, including brain, liver, heart, lung, kidney, spleen and various tumors, with more than 20,000 samples processed to date. It provides a stable and reliable solution for single-nucleus RNA sequencing.

Tissue Types Validated by Single-nucleus RNA Sequencing


Immune System	Digestive System	Urinary System	Reproductive System	Brain tumors	Gastrointestinal tumors	Uro-genital tumors	Soft tissue tumors
Lymphoid	Liver	Kidney	Cervix	Glioma	Stomach cancer	Renal cancer	Osteosarcoma
Thymus	Stomach	Bladder	Endometrium	Head and Neck tumors	Colorectal cancer	Urothelial cancer	Haemangioma
Respiratory System	Pancreas	Circulatory System	Mammary gland	Oral cancer	Liver cancer	Testis cancer	Lung cancer
Lung	Integumentary System	Blood vessel	Ovary	Nasopharyngeal carcinoma	Pancreatic cancer	Prostate cancer	Lung cancer
Sinus	Skin	Heart	Placenta	Throat cancer	Esophageal cancer	Penile cancer	Lymphoid tumors
Nasal polyp	Eyelid	Sensory System	Nervous System	Laryngopharynx cancer	Cholangio carcinoma	Ovarian cancer	Lymphoma
Nasal mucosa		Choroid	Brain	Laryngopharynx cancer	Gallbladder cancer	Endometrial cancer	Endocrine tumors
		Olfactory epithelium		Skin tumors	Breast tumors	Cervical cancer	Thyroid cancer
				Melanoma	Breast cancer		Neuroendocrine tumors

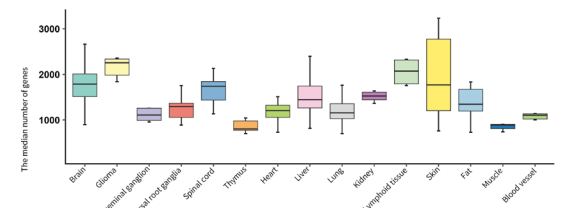


The median genes per cell for different types of tissues (snRNA-seq)



The median genes per cell for different types of tissues (snRNA-seq)

	Nervous System	Urinary System	Circulatory System	Musculoskeletal System
	Brain	Kidney	Blood vessel	Lumbar vertebrae
	Choroid plexus	Digestive System	Heart	Muscle
	Spinal cord	Stomach	Reproductive System	Immune System
	Dorsal root ganglia	Liver	Cervix	Lymphoid
	Trigeminal ganglia	Ileum	Mammary gland	Thymus
	Sympathetic ganglia	Pancreas	Testis	Integumentary System
	Respiratory System	Sensory System	Other	Skin
	Lung	Choroid	Fat	Eyelid
			Embryo	



The median genes per cell for different types of tissues (snRNA-seq)

Other Species:



Publications

The product has been cited in 36 high-impact research papers published in international journals, with an average impact factor (IF) exceeding 8.3. Selected application papers include:

1. Zhang L, Ma J, Zhang J, et al. Radiotherapy-Associated Cellular Senescence and EMT Alterations Contribute to Distinct Disease Relapse Patterns in Locally Advanced Cervical Cancer. *Adv Sci (Weinh)*. Published online February 4, 2025. (IF: 14.3)
2. Ji J, Ding K, Cheng B, et al. Radiotherapy-Induced Astrocyte Senescence Promotes an Immunosuppressive Microenvironment in Glioblastoma to Facilitate Tumor Regrowth. *Adv Sci (Weinh)*. 2024;11(15):e2304609. (IF: 14.3)
3. Lv D, Liu A, Yi Z, et al. Neuroligin 1 Regulates Autistic-Like Repetitive Behavior through Modulating the Activity of Striatal D2 Receptor-Expressing Medium Spiny Neurons. *Adv Sci (Weinh)*. 2025;12(5):e2410728. (IF: 14.3)
4. Sun W, Zhu Y, Zou Z, et al. An advanced comprehensive multi-cell-type-specific model for predicting anti-PD-1 therapeutic effect in melanoma. *Theranostics*. 2024;14(5):2127-2150. Published 2024 Mar 3. (IF: 12.4)

