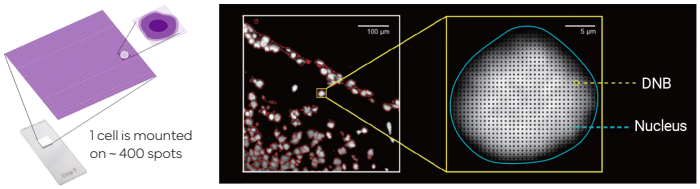
STOmics | Complete GENOMICS™

Mapping the Changing Brain at Single Cell Resolution

From mapping human brain cellular architecture to unpacking developmental gradients, trajectories, and circuit dynamics, Stereo-seq technology enables researchers to explore cell-type transitions and circuit dysfunction with unmatched clarity. It is compatible with both fresh-frozen (FF) and formalin-fixed paraffin-embedded (FFPE) samples, delivering single cell resolution across entire brain regions — or even whole brains — while capturing full transcriptomic diversity along with protein of interests in a single experiment. This provides a powerful spatial molecular framework to connect genes, cells, and circuits, accelerating discoveries in neural systems across health, dysfunction, and disease.

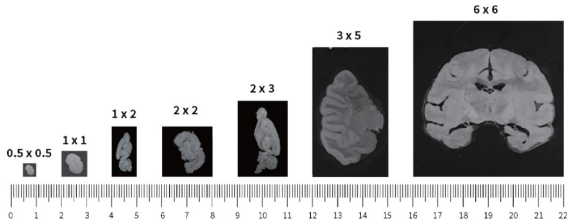
Achieve True Single Cell Resolution

Leverage DNBSEQ™ technology to achieve true single cell resolution, where 1 cell is mounted on ~400 spots



Large Capture Area

Stereo-seq offers a range of chip sizes to accommodate diverse tissue and organ research needs.



Featured Publication

Single-cell spatial transcriptome atlas and whole-brain connectivity of the macaque claustrum

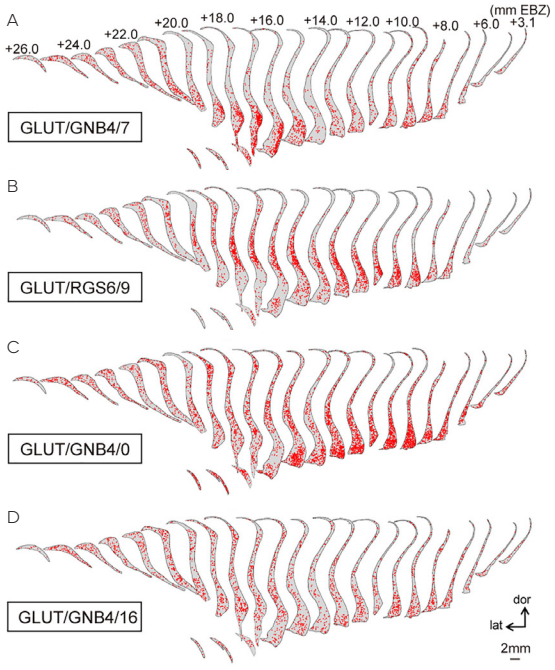
Lei, Ying et al., Cell, 2025

Species: Macaques Sample type: Fresh Frozen

Stereo-seq revealed distinct connectivity-based zones linked to specific cortical and subcortical functions, thereby providing an unprecedented framework for understanding claustral organization in primates.

- Transcriptomic analysis revealed 48 cell types, with many enriched in distinct zones
- Claustral glutamatergic cell types are similar to those of insular deep-layer neurons
- Local claustral zones connect to functionally related cortical and subcortical areas

Product	Cat. No.
Stereo-seq Transcriptomics Set for Chip-on-a-slide (1cm*1cm) V1.3	211ST13114-CG
Stereo-seq Transcriptomics Set (1cm*2cm) V1.3	111ST13122-CG
Stereo-seq Transcriptomics Set (3cm*5cm) V1.3	111ST13351-CG



Spatial maps showing typical distribution patterns of glutamatergic cell types in macaque claustrum.

 | 2904 Orchard Parkway, San Jose CA 95134 | REV 1.1 SEP2025

For Research Use Only. Not for use in diagnostic procedures.

Featured Publication

Stereo-seq of the prefrontal cortex in aging and Alzheimer's disease

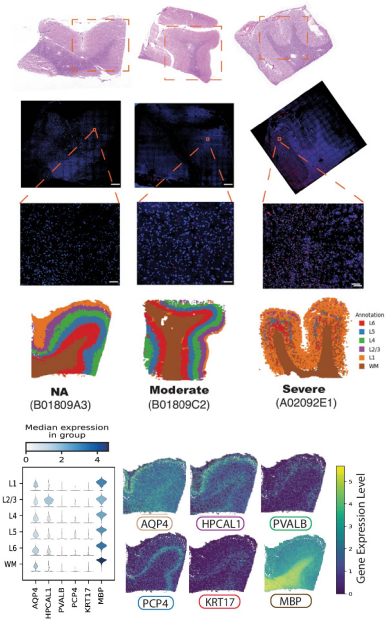
Gong, Y. et al., *Nat Commun*, 2025

Species: Human Sample type: Fresh Frozen

Stereo-seq enabled the discovery of three neuronal gene modules tied to neuroprotection, protein dephosphorylation, and amyloid-beta regulation to pinpoint ZNF460 as a potential therapeutic target.

- Generated the first subcellular-resolution spatial transcriptome atlas of the human prefrontal cortex using Stereo-seq in Alzheimer's disease (AD) and control samples.
- Revealed transcriptional alterations, laminar structural disruptions, and changes in layer-to-layer and cell-cell communication associated with AD.
- Identified stress-related genes in neurons and glial cells, with AD-linked reductions in amyloid-beta clearance interactions.

Product	Cat. No.
Stereo-seq Transcriptomics Set for Chip-on-a-slide (1cm*1cm) V1.3	211ST13114-CG



Overview of histological and spatial transcriptomic profiling across different stages of disease progression.

Additional Publications

Publication	Species	Sample Type	Publication Link
Whole-brain spatial organization of hippocampal single-neuron projectomes Shou Qiu et al., *Science*, 2024	Mice	Fresh Frozen	
Cross-species single-cell spatial transcriptomic atlases of the cerebellar cortex Shijie Hao et al., *Science*, 2024	Macaque, Marmoset, and Mice	Fresh Frozen	
Spatiotemporal transcriptome atlas reveals the regional specification of the developing human brain Li, Yanxin et al., *Cell*, 2023	Human	Fresh Frozen	
Single-cell spatial transcriptome reveals cell-type organization in the macaque cortex Chen, Ao et al., *Cell*, 2023	Macaque	Fresh Frozen	

To learn more, visit completegenomics.com/stereo-seq

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