

Mississippi State University
Notice of Proposed Sole Source Purchase

256-070

Mississippi State University anticipates purchasing the item(s) listed below as a sole source purchase. Anyone objecting to this purchase shall follow the procedures outlined below.

1. Commodity or commodities to be purchased (make, model, description):

GEM-X Universal 3' Gene Expression v4, 16 samples, Chromium GEM-X Single Cell 3' Chip Kit v4, 4 chips

2. Explanation of the need to be fulfilled by this item(s), how is it unique from all other options, and why it is the only one that can meet the specific needs of the department:

The 10X Genomics Chromium Single Cell system is a highly specialized platform designed to prepare single cell samples for high-throughput single-cell analysis, including single-cell RNA sequencing (scRNA-seq), single-cell ATAC sequencing (scATAC-seq), and multiomic profiling (combined gene expression and epigenomic accessibility). These capabilities are essential to my lab's research in molecular and immunological research using rare and heterogeneous cell populations.

The reagents in question are proprietary to 10X Genomics and are required to operate the Chromium system. These reagents include uniquely barcoded gel beads, enzymes, buffers, chips, and specialized consumables that are custom-designed to interface exclusively with the Chromium X instrument and 10X Genomics software pipelines (e.g., Cell Ranger, Loupe Browser). No third-party or generic substitutes are compatible with this closed, patented system.

Use of non-10X reagents would not only invalidate experimental results, but also render the system inoperable due to reagent-chip-instrument interdependencies, proprietary microfluidic architecture, and the need for validated chemistry and software integration. As such, 10X Genomics is the sole source for the reagents necessary to generate and analyze single-cell libraries using their system.

In conclusion, this purchase is critical to enable my ongoing USDA-funded research. No alternative vendor or product can fulfill the functional, technical, or compatibility requirements of this instrument.

3. Name of company/individual selling the item and why that source is the only possible source that can provide the required item(s):

10X Genomics is the sole manufacturer of the listed products.

4. Estimated cost of item(s) and an explanation why the amount to be expended is considered reasonable:

\$20,116.00.

5. Explanation of the efforts taken by the department to determine this is the only source and the efforts used to obtain the best possible price:

The department has not been able to find any comparable equipment sold by another vendor.

Any person or entity that objects and proposes that the commodity listed is not sole source and can be provided by another person or entity shall submit a written notice to:

Jennifer Mayfield, CPPO

Director of Procurement Services, Chief Procurement Officer

jmayfield@procurement.msstate.edu

Subject Line must read "Sole Source Objection"

The notice shall contain a detailed explanation of why the commodity is not a sole source procurement. Appropriate documentation shall also be submitted if applicable.

If after a review of the submitted notice and documents, MSU determines that the commodity in the proposed sole source request can be provided by another person or entity, then MSU will withdraw the sole source request publication from the procurement portal website and submit the procurement of the commodity to an advertised competitive bid or selection process.

If MSU determines after review that there is only one (1) source for the required commodity, then MSU will appeal to the Public Procurement Review Board. MSU will have the burden of proving that the commodity is only provided by one (1) source.