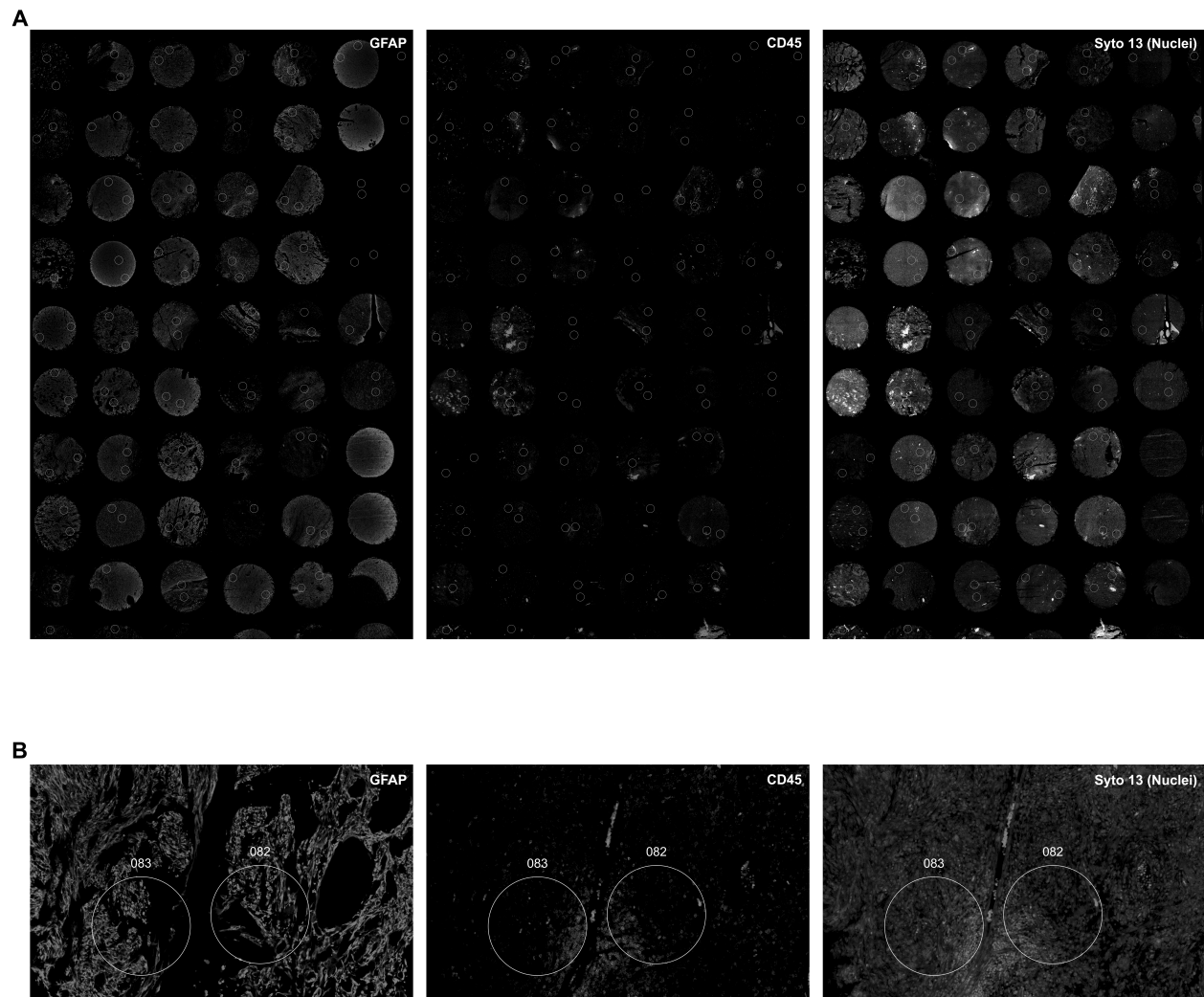
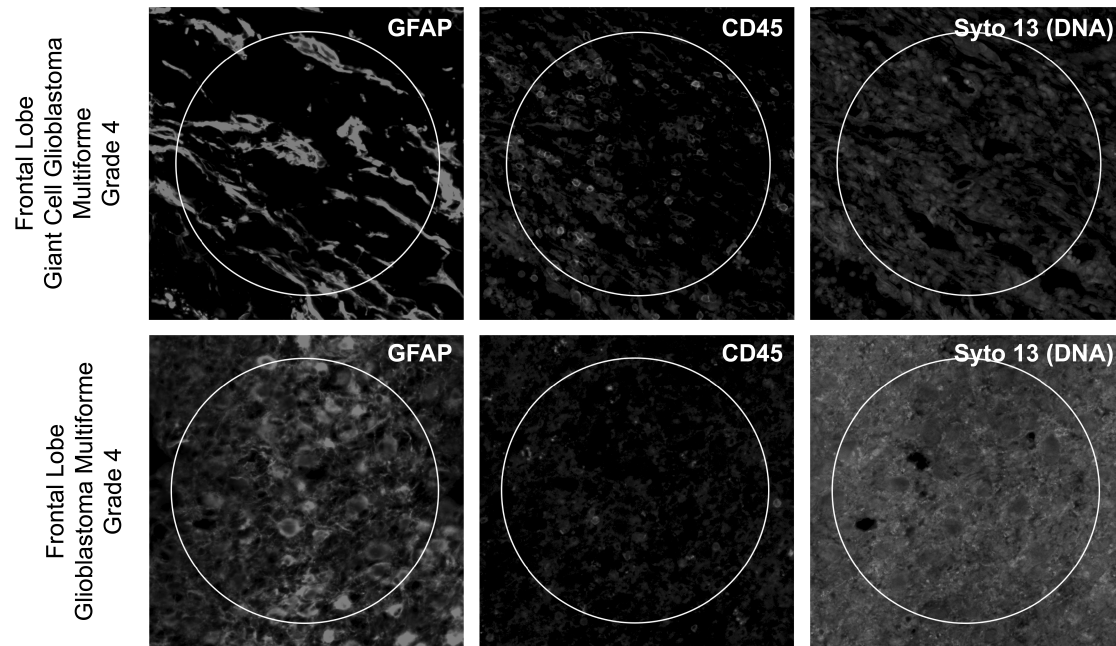


Supplementary Figure S19



Supplementary Figure S19: Representative images used in the assessment of spatial proteogenomic data quality on Glioblastoma multiforme Grade 4. (A) Human brain glioblastoma tissue array was stained with the GeoMx NGS Human Protein modules (147-plex), WTA, and antibodies against GFAP (Astrocyte/Tumor; left panel), CD45 (Immune; middle panel) and Syto13 (Nuclei; right panel). (B) ROI were segmented into GFAP⁺ (left panel), CD45⁺ (middle panel) or Syto13 (right panel).

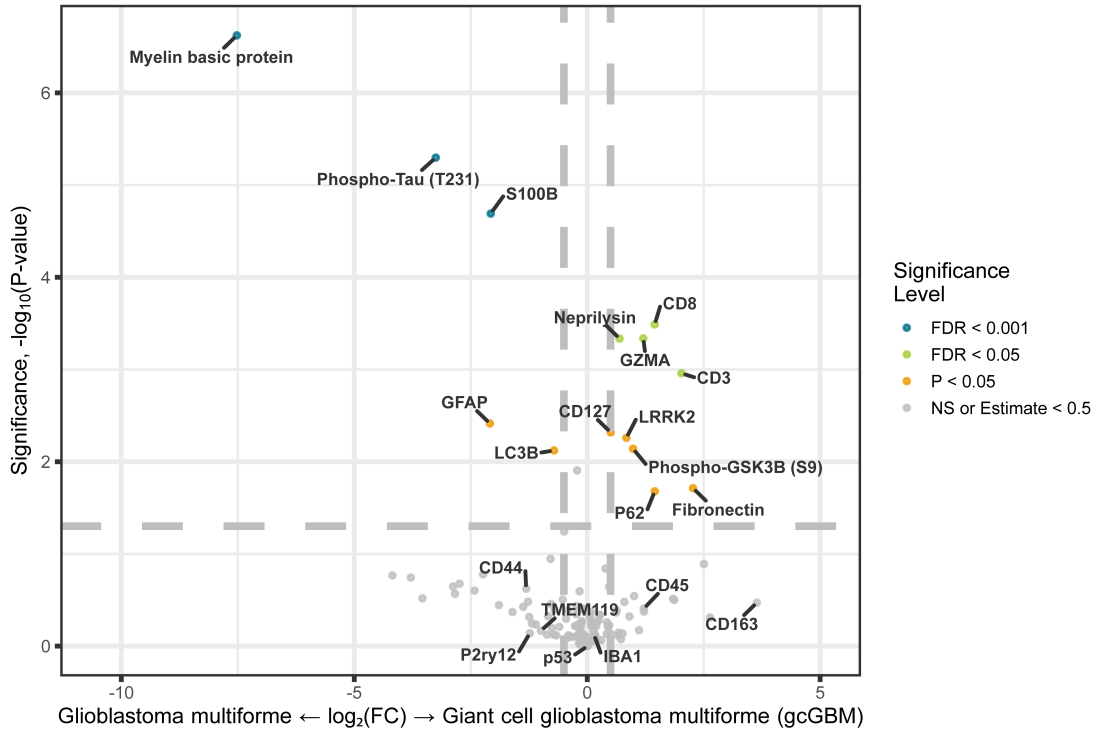
Supplementary Figure S20



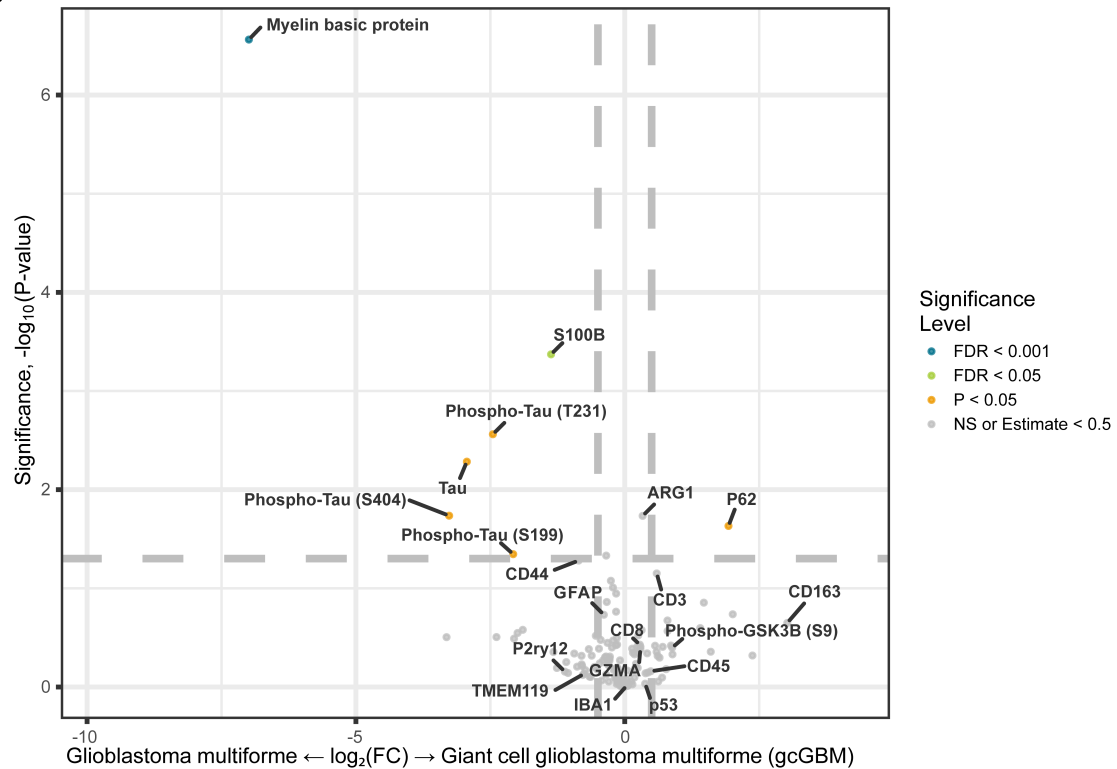
Supplementary Figure S20: Representative images used in the assessment of spatial proteogenomic data quality on gcGBM and GBM. ROIs for gcGBM (top panel) and GBM (bottom panel) were segmented into GFAP⁺ (Astrocyte/Tumor; left panel), CD45⁺ (Immune; middle panel) and Syto13 (Nuclear, DNA; right panel).

Supplementary Figure S22

A



B



Supplementary Figure S22: Differential protein expression analysis between GBM and gcGBM. Volcano showing the differential protein expression profiles for (A) CD45- and (B) GFAP-enriched segments within the left frontal lobe. Proteins with significantly differential expression are highlighted either orange (P -value < 0.05), green (FDR < 0.05) or blue (FDR < 0.001), whereas proteins in grey show no significant difference in expression. A subset of differentially expressed proteins are labeled.