

Paper Validation Report

for **cellpose_plus**



Correspondence: Yes

Percentages: 95.0%

Conclusion:

The codebase closely implements the methods, models, and algorithms described in the paper. Core experimental procedures such as polymer/cell preparation, image acquisition, segmentation using an extended Cellpose framework (Cellpose+), feature extraction (including Voronoi diagrams, roundness, area, and symmetry), and statistical analysis (ANOVA) are directly supported by the scripts and modules. The repository provides command-line and GUI workflows, enables batch processing, supports feature extraction matching the described experimental measures, and includes the released dataset, facilitating reproducibility of results and figures. However, minor discrepancies might exist in replicating exact statistical results or figure/table layouts; nonetheless, the substantive alignment is clear and near complete.