HUVEC Cell Analysis Report

Biological Feature Summary

Analysis Date: 2024-10-31 17:55:40

1. Population Overview

Total Cells Analyzed: 327

Viable Cells: 327

Multi-nucleated Cells: 28

2. Nuclear Characteristics

Average Cell Area: $3191.91 \pm 41260.40 \mu m^2$ Mean Cell Perimeter: $573.59 \pm 6597.37 \mu m$

Average Eccentricity: 0.82

3. Mitochondrial Network Analysis

Average Network Branches: 8.7 Mean Fragment Length: 9.55 Average Fragmentation Index: 0.01

4. Golgi Apparatus Analysis

Average Fragment Count: 4.9 Mean Fragment Size: 117.57 Average Compactness: 0.55

5. Cell Junction Analysis

Junction Continuity: 0.94 Junction Length: 453.39

6. Cell Morphology

Average Elongation: 3.06

Average Orientation: 0.08 radians

7. Quality Metrics

Valid Cells: 327 out of 327

Quality Score: 1.00