

A (see Fig. 6A)

NIH3T3 cells	<u>AcTub</u>	<u>Smo-GFP</u>	<u>Arl13b</u>
Images Analyzed	15	14	9
Manual TC	11.9±2.8	5.0±1.5	7.9±3.5
Automated TC	11.5±2.4 (96%)	4.3±1.3 (86%)	7.6±3.6 (96%)
FP	2.7±1.9 (23%)	0.2±0.6 (4%)	0.1±0.3 (1%)
FN	0.5±0.9 (4%)	0.7±0.9 (14%)	0.3±0.5 (4%)
Precision (α)	0.81	0.95	0.99
Recall (β)	0.96	0.86	0.96
F1 score	0.88	0.90	0.97
Accuracy	++/+++	+++	++++

B (see Fig. 6B)

RPE cells	<u>AcTub</u>	<u>Smo-GFP</u>	<u>Arl13b</u>
Images Analyzed	9	11	25
Manual TC	18.3±4.9	15.1±2.7	10.9±6.5
Automated TC	18.2±5.0 (99%)	14.6±3.0 (97%)	10.8±6.4 (99%)
FP	3.0±2.1 (16%)	2.2±0.9 (14%)	0.7±0.8 (6%)
FN	0.1±0.3 (1%)	0.5±0.7 (3%)	0.2±0.5 (1%)
Precision (α)	0.86	0.87	0.94
Recall (β)	0.99	0.97	0.99
F1 score	0.92	0.92	0.96
Accuracy	+++	+++	++++

C (see Fig. 6C)

RPE cells	<u>Arl13b (60X)</u>	<u>Arl13b (40X)</u>
Images Analyzed	25	191
Manual TC	10.9±6.5	27.5±16.4
Automated TC	10.8±6.4 (99%)	26.2±15.9 (95%)
FP	0.7±0.8 (6%)	1.2±1.3 (4%)
FN	0.2±0.5 (1%)	1.3±1.3 (5%)
Precision (α)	0.94	0.96
Recall (β)	0.99	0.95
F1 score	0.96	0.96
Accuracy	++++	++++