

Table III

Comparison of some methods for manual and semiautomatic embryonic lineage recording

Software name	Data	Maximum nuclei tracked	Method	Time required	Error rate	Reference
SIMI Biocell	DIC	385 cells full/114 cells up to 1.5 fold	Manual	N/A	N/A	(Schnabel <i>et al.</i> , 1997)
Angler	DIC	end of gastrulation/ 300 cells	Manual	N/A	N/A	(Martinelli <i>et al.</i> , 1997)
N/A	DIC	24 cells	Automated	N/A	N/A	(Hamahashi <i>et al.</i> , 2005)
StarryNite	GFP	350 cells	Automated	8 h up to 350 cells	1–3% up to 194 cells, larger up to 350 cells	(Bao <i>et al.</i> , 2006)
Endrov	DIC/GFP	150 cells full/partial later stage	Manual	N/A	N/A	(Hench <i>et al.</i> , 2009)
NucleiTracker4D	GFP	566 live/ 669 total cells	Semiautomated	For GFP confocal = 4 h up to 350 cells 8–16 h to 525 cells	Up to 3% to 350 cells, up to 15% to 525 cells (at each time-point).	CAG & ADC, unpublished