Materials List for:

Expedited Radiation Biodosimetry by Automated Dicentric Chromosome Identification (ADCI) and Dose Estimation

Ben Shirley*[1], Yanxin Li*[1], Joan H.M. Knoll[1,2], Peter K. Rogan[1,3]

[1]CytoGnomix Inc.

[2]Department of Pathology and Laboratory Medicine, Western University

[3]Department of Biochemistry, Western University

*These authors contributed equally

Correspondence to: Peter K. Rogan at progan@uwo.ca

URL: https://www.jove.com/video/56245
DOI: doi:10.3791/56245

Materials

Name	Company	Catalog Number	Comments
Automated Dicentric Chromosome Identifier and Dose Estimator (ADCI)	CytoGnomix	NA	ADCI software is released in a binary installation package file for Microsoft Windows 7, 8, 8.1 and 10; 235 Mb of disk storage are required for a typical installation. The software has been tested with Intel or AMD x86-64 processors; at least 1 Gb RAM is recommended. Analyses have been benchmarked on a computer configured with an Intel I7 processor and 16 Gb RAM. Operation of ADCI requires an active license and a USB-based hardware dongle, which must remain plugged in while the software is executing. The dongle encodes the software expiry date. Each time the software is started, this date is read. The software will allow access to the program if the current date and time precedes the expiration time-date stamp. Extending an expired software license can be accomplished by obtaining a new dongle or by renewing the license with an updated key at startup.
Digital images of metaphase cell nuclei	Examples: Metasystems, Leica Microsystems	M-Search (Metasystems), Cytovision (Leica) software	High resolution TIFF format; typically>250 digital images generated with a microscope imaging capture system (minimum 63X magnification objective, 10X magnification ocular).
MSI Leopard Pro (recommended, optional)	Micro-Star International	MSI GP62 6QF 480CA Leopard Pro	Multi-core performance workstation.