

Materials List for:

Detection of Inter-chromosomal Stable Aberrations by Multiple Fluorescence *In Situ* Hybridization (mFISH) and Spectral Karyotyping (SKY) in Irradiated Mice

Rupak Pathak¹, Igor Koturbash², Martin Hauer-Jensen^{1,3}

¹Division of Radiation Health, Department of Pharmaceutical Sciences, College of Pharmacy, University of Arkansas for Medical Sciences

²Department of Environmental Health, Fay W. Boozman School of Public Health, University of Arkansas for Medical Sciences

³Surgical Service, Central Arkansas Veterans Healthcare System

Correspondence to: Rupak Pathak at RPathak@uams.edu

URL: <https://www.jove.com/video/55162>

DOI: [doi:10.3791/55162](https://doi.org/10.3791/55162)

Materials

Name	Company	Catalog Number	Comments
Formamide	Sigma-Aldrich	221198-100ML	
SSC Buffer 20× Concentrate	Sigma-Aldrich	S6639-1L	
SKY Laboratory Reagent for Mouse	Applied Spectral Imaging	FPRPR0030/M40	
CAD - Concentrated Antibody Detection Kit	Applied Spectral Imaging	FPRPR0033	
Single Paints Customized - 3 Colors; Mouse chromosome 1: Red, Mouse chromosome 2: Green, Mouse chromosome 3: Aqua	Applied Spectral Imaging	FPRPR0182/10	
Glass coverslips	Fisher Scientific	12-545B	
Tween 20	Fisher Scientific	BP337-100	
Hydrochloric acid, 37%, Acros Organics	Fisher Scientific	AC45055-0025	
Fisherbrand Glass Staining Dishes with Screw Cap	Fisher Scientific	08-816	
KaryoMAX Potassium Chloride Solution	Life Technologies	10575-090	
Fisherbrand Superfrost Plus Microscope Slides	Fisher Scientific	12-550-15	
Colcemid powder	Fisher Scientific	50-464-757	
Histopaque-1083	Sigma-Aldrich	10831	
Shepherd Mark I, model 25 ¹³⁷ Cs irradiator	J. L. Shepherd & Associates	Model 484B	
Syringe 1 mL	BD Biosciences	647911	
Ethyl Alcohol, 200 Proof	Fisher Scientific	MEX02761	
PBS, (1x PBS Liq.), w/o Calcium and Magnesium	Fisher Scientific	ICN1860454	
Fetal Bovine Serum	Fisher Scientific	10-437-010	
Methanol	Fisher Scientific	A454SK-4	
Glacial acetic acid	Fisher Scientific	AC295320010	
Zeiss Microscope	Zeiss	AXIO Imager.Z2	