

Materials List for:

Quantification of γ H2AX Foci in Response to Ionising Radiation

Li-Jeen Mah^{1,2}, Raja S. Vasireddy^{1,2,3}, Michelle M. Tang^{1,3}, George T. Georgiadis¹, Assam El-Osta^{2,3}, Tom C. Karagiannis^{1,2}

¹Epigenomic Medicine, Baker IDI Heart and Diabetes Institute, The Alfred Medical Research and Education Precinct

²Department of Pathology, The University of Melbourne

³Epigenetics in Human Health and Disease, Baker IDI Heart and Diabetes Institute, The Alfred Medical Research and Education Precinct

Correspondence to: Tom C. Karagiannis at tom.karagiannis@bakeridi.edu.au

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Materials

Name	Type	Company	Catalog Number	Comments
Keratinocyte-Serum Free Medium (K-SFM)	Media	Invitrogen	17005042	Keratinocyte media supplemented with human recombinant Epidermal Growth Factor 1-53 (EGF 1-53), and Bovine Pituitary Extract (BPE).
Lab Tek II Chamber Slides (8-well)	Chamber Slides	Nalge Nunc international	NUN154534	
Coverslips (22x50mm)	Coverslips	Menzel-Glaser	CS2250100	
Bovine Serum Albumin (BSA)		Sigma-Aldrich	A7906	BSA (1%) is used to block any non-specific antibody binding. Primary and secondary antibodies are diluted in BSA.
PBS (without Ca ²⁺ and Mg ²⁺)		Invitrogen	17-517Q	
0.5% Trypsin-EDTA x10		Invitrogen	15400-054	Trypsin-EDTA (0.05%) used to detach cells from culture flasks.
Triton X-100	Reagent	Sigma-Aldrich	T8787	Triton X-100 (0.1%) used to permeabilise cells.
Paraformaldehyde	Reagent	Sigma-Aldrich	158127	Paraformaldehyde (4%) used to fix cells.
Mouse monoclonal anti-phospho histone-H2AX antibody	Primary Antibody	EMD Millipore	16193	Dilution of primary antibody (1:500), in 1% BSA.
Alexa Fluor 488 goat anti-mouse IgG (H+L)	Secondary Antibody	Invitrogen	11029	Dilution of secondary antibody (1:500), in 1% BSA.
TOPRO3	DNA Stain	Invitrogen	T3605	DNA stain commonly used: 4,6-diamidino-2-phenylindole dihydrochloride (DAPI). Can only be used with microscopes with the appropriate excitation laser.
ProLong Gold	Anti-fade solution	Invitrogen	P36930	Refractive index of 1.42 at 20°C.
Tissue Culture Flask, Vented Cap	Culture Flask	BD Biosciences	353112	
Tissue Culture Dish (150x25mm)	Petridish	BD Biosciences	353025	
Coplin Jar, glass		Grale Scientific P/L	1771-OG	

Staining Trough		Grate Scientific P/L	V1991.99	
Gammacell 1000 Elite Irradiator	Gamma Irradiator	Nordion International Inc.		
Zeiss LSM 510 Meta Confocal	Confocal Microscope			
Metamorph	Software for Imaging analysis	Molecular Devices		