

**Materials List for
Comet Assay for DNA Damage Detection in Cells**

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URL: <https://www.jove.com/video/21317>

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Materials

Name	Company	Catalog Number	Comments
22 x 22 mm glass coverslips	Fisher Scientific, Hampton, NH, USA	631-0124	
Fluorescence microscope equipped with a camera	Zeiss, Jena, Germany		
HTP Comet Assay system	Cleaver Scientific	COMPAC- 50	
Human Keratinocyte (HaCaTs)	American Type Culture Collection (ATCC), Manassas, VA, USA	Discontinued	Can be purchased from another company ADDEXBIO TECHNOLOGIES Cat# T0020001
Hydrogen peroxide (H ₂ O ₂) 30% in water	Fisher Scientific, Hampton, NH, USA	BP2633-500	
Image and Data Analysis software	Perceptive Instrument, Bury St Edmunds, England, UK	125525	Free image analysis software is available e.g., ImageJ
Low melting point Agarose	Invitrogen Waltham, MA, USA	P4864	
Na ₂ EDTA (disodium ethylenediaminetetraacetic acid)	Sigma Aldrich, St. Louis, MO, USA	E5134	
NaCl (Sodium chloride)	Sigma Aldrich, St. Louis, MO, USA	S7653	
Nanopure Infinity Ultrapure Water System (Barnstead Nanopure)	Thermo Scientific, Waltham, MA, USA	D11901	Ultrapure water (16 MΩ cm ⁻¹)
NaOH (sodium Hydroxide)	Sigma Aldrich, St. Louis, MO, USA	E5134	
Normal melting point Agarose	Fisher Scientific, Hampton, NH, USA	16520100	For pre-coating slides
Propidium Iodide (1.0 mg/mL in water)	Sigma Aldrich, St. Louis, MO, USA	12-541BP486410ML	
Single-frosted glass microscope slides	Fisher Scientific, Hampton, NH, USA	12-541B	
Slide box	Fisher Scientific, Hampton, NH, USA	03-448-2	Light proof, to protect cells from the formation adventitious damage (according to the widely held view) and prevent fading of the fluorescent dye
Slide Chilling plate	Cleaver Scientific, Rugby, England, UK	CSL-CHILLPLATE	
Treatment dish	Cleaver Scientific, Rugby, England,	STAINDISH4X	

	UK		
Tris-base	Sigma Aldrich, St. Louis, MO, USA	93362	
Triton X-100	Fisher Scientific, Hampton, NH, USA	BP151-500	
Trypsin EDTA (0.5%)	Invitrogen Gibco, Waltham, MA, USA	15400054	
Vertical Slide Carrier	Cleaver Scientific, Rugby, England, UK	COMPAC-25	