

Materials List for:

Using Terminal Transferase-mediated dUTP Nick End-labelling (TUNEL) and Caspase 3/7 Assays to Measure Epidermal Cell Death in Frogs with Chytridiomycosis

Laura A. Brannelly^{1,2}, Alexandra A. Roberts¹, Lee F. Skerratt¹, Lee Berger¹

¹One Health Research Group, College of Public Health, Medical and Veterinary Sciences, James Cook University

²Department of Biological Sciences, University of Pittsburgh

Correspondence to: Laura A. Brannelly at Laura.Brannelly@pitt.edu

URL: <https://www.jove.com/video/57345>

DOI: [doi:10.3791/57345](https://doi.org/10.3791/57345)

Materials

Name	Company	Catalog Number	Comments
POLARstar Omega	BMG Labtech		Luminescent plate reader
384 well flat clear bottom plate	Corning	3707	
384 well low flange white flat bottom plate	Corning	3570	
Agar Bacteriological (Oxoid)	Fisher	OXLP0011B	
Formal-Fixx 10% Neutral Buffered Formalin	Fisher	6764254	
Lactose Broth (Oxoid)	Fisher	OXCM0137B	
Sodium Bicarbonate	Fisher	BP328-500	
Tricane-S (MS-222)	Fisher	NC0872873	
Tryptone	Fisher	BP1421-500	
Bovine Serum Albumin	Invitrogen	15561020	
Sterile rayon swab	Medical Wire & Equipment	MW-113	
ApopTag Red In Situ Apoptosis Detection Kit	Merck Millipore	S7165	
Coomassie Bradford reagent	Pierce	23200	
Caspase Glo 3/7	Promega	G8090	
HEPES buffer	Sigma Aldrich	H0887-20ML	
Magnesium chloride	Sigma Aldrich	1374248-1G	
Gelatin hydrolysate Enzymatic	Sigma-Aldrich	G0262	
PBS (Phosphate Buffered Saline), pH 7.2 (1X)	Thermo/Life	20-012-043	
Prepman	Thermo/Life	4318930	
TaqMan Fast Advanced Master Mix	ThermoFisher	4444556	
Parafilm	Bemis	PM996	
Clorox bleach	Clorox		
Ethanol, 200 Proof, Molecular Grade	Fisher	BP2818500	
ZEISS Axio Scan florescent microscope	Carl Zeiss		Florescent microscope
3.2mm stainless steel beads	BioSpec	11079132SS	
Primer ITS1-3 Chytr (5'-CCTTGAT ATAATACAGTGTGCCATATGTC-3')	Taqman		Individual design for primers and probe
Primer 5.8S Chytr (5'-TCGGTT CTCTAGGCAACAGTTT-3')	Taqman		Individual design for primers and probe

Minor groove binder probe Chytr MGB2(5'-CGAGTCGAAC-3')	Taqman		Individual design for primers and probe
Rotor-Gene qPCR Instruments	Qiagen		qPCR machine
Microcentrifuge tubes 1.5ml	Fisher	02-681-372	
Cell culture petri plates	Nunc	263991	
Mini-beadBeater Zircornia-Silicate Beads, 0.5mm	BioSpec	11079105Z	