

Materials List for:

***In vitro* Cell Culture Model for Toxic Inhaled Chemical Testing**

Shama Ahmad¹, Aftab Ahmad¹, Keith B. Neeves², Tara Hendry-Hofer¹, Joan E. Loader¹, Carl W. White¹, Livia Veress¹

¹Pediatric Airway Research Center, Department of Pediatrics, University of Colorado

²Department of Chemical and Biological Engineering, Colorado School of Mines

Correspondence to: Shama Ahmad at SHAMA.AHMAD@ucdenver.edu

URL: <https://www.jove.com/video/51539>

DOI: [doi:10.3791/51539](https://doi.org/10.3791/51539)

Materials

Name	Company	Catalog Number	Comments
Rats	Harlan Laboratories	Sprague-Dawley	
Pentobarbital	Sigma-Aldrich	P3761	
Chlorine	AirGas, Inc	X02NI99CP163LS1	
Caspase 3/7 kit	Promega	G8091	
Epithelial voltohmmeter and chopstick electrode	World Precision Instruments	EVOM and STX2	
Snapwell inserts	Corning	07-200-708	
70 micron nylon cell strainer	Corning	#352360	
Polysulfone biocontainment chambers	BCU, Allentown Cage Equipment	BCU	
DMEM	Life technologies	12491-015	
Sarcomeric actin antibody	Abcam Cambridge, MA	ab28052	
SERCA2 antibody	Affinity Bioreagents, Golden, CO	MA3-9191	
Ki-67 antibody	Dako, Carpinteria, CA	M7248	
Alexa 488-conjugated secondary antibody	Invitrogen, Grand Island, NY	A11029	
BSA	Sigma-Aldrich	A9418	
Carnitine	Sigma-Aldrich	C0283	
Taurine	Sigma-Aldrich	T8691	
Creatinine	Sigma-Aldrich	C6257	
Krebs Ringer Buffer	Sigma-Aldrich	K4002	
Protease	Sigma-Aldrich	P5147	
Collagenase	Sigma-Aldrich	C6885	
DNAase	Sigma-Aldrich	DN-25	
Lactated Ringer solution	Abott Laboratories	7953	
Donkey serum	Fisher Scientific	017-000-001	
PBS, phosphate buffered saline	Sigma-Aldrich	D1408	
4-15% SDS-PAGE gels	Bio-Rad	456-1083	
Nitrocellulose membrane	Bio-Rad	162-0115	
Dergent, Tween	Sigma-Aldrich	P1379	
Peroxidase detection kit	Pierce	3402	
DAPI	Sigma-Aldrich	D9542	
Mounting media, Fluormount G	eBiosciences	00-4958-02	
Sodium citrate	Sigma-Aldrich	71497	
Collagen	Sigma-Aldrich	C7521	

MEM	Sigma-Aldrich	M8028	
Laminin	BD biosciences	354259	
Penicillin/streptomycin	Life Technologies	15070063	
FBS	Gibco	200-6140AJ	