

Materials List for:

Isolation of Mouse Respiratory Epithelial Cells and Exposure to Experimental Cigarette Smoke at Air Liquid Interface

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Materials

Name	Company	Catalog Number	Comments
Ham's F12 Medium 1X	Cellgro	MT-10-080-CM	With L-glutamine
Pen/strep	Lonza Inc.	17-602E	
Pronase	Roche Group	10165921001	<i>Streptomyces griseus</i>
Collagen I	BD Biosciences	354236	From rat tail
Acetic Acid	Sigma-Aldrich	338826-25	
DNaseI	Sigma-Aldrich	DN25-100MG	From Bovine Pancreas
Bovine Serum Albumin	Fisher Scientific	BP1605-100	Fraction V
Retinoic Acid	Retinoic Acid	R265-50MG	
Hank's Balanced Salt Solution	GIBCO, by Life Technologies	14175	Without Ca++ or Mg++
DMEM-F12	Cellgro	MT-15-090-CM	Without L-Glutamine or HEPES
HEPES, 1M in H ₂ O	Sigma-Aldrich	83264-100ML	
L-Glutamine	Sigma-Aldrich	G7513-100ML	200 mM
Amphotericin B (Fungizone)	Fisher Scientific	1672346	
Insulin	Sigma-Aldrich	16634-50MG	Bovine Pancreas
Apo-transferrin (human)	Sigma-Aldrich	T1147-100MG	
Cholera toxin	Sigma-Aldrich	C8052	<i>Vibrio Cholerae</i>
Epidermal growth factor	BD Biosciences	354001	Mouse
Bovine pituitary Extract	BD Biosciences	354123	
NuSerum	BD Biosciences	355100	
Transwell	Corning	3401	12 mm, 0.4 mm Pore Polycarbonate
Primaria 100 mm culture dish	Falcon BD	353803	
Pallflex membrane	Pall Corporation	EMFAB TX40H120-WW	
Smoking Machine	EMI Services	ATCSALI-1	see Footnote*

*The cigarette smoking machine is a custom designed and fabricated 14"x14"x20" Dual chambered and water jacketed light tint clear proof 1/2" thick polycarbonate Lexan chamber for cigarette smoke exposure with temperature controlled, water level sensor controlled shut off system. A cigarette smoking/puffing unit is installed for a variable cigarette puffing rates. When the unit is in use, it mimics an incubator in the sense that the temperature, humidity and carbon dioxide are controlled in the system. The system includes: (I) a customized dual chamber/water jacketed unit that maintains a controlled environment for tissue culture experiments. (II) A digital heavy duty, high precision dual pump water temperature circulator system with water level sensor and temperature control (III) A cigarette smoking unit with puffing pump. (IV) A pump cycle sensor control rate cyler (IV) A Stainless steel high precision in-Line filter holder. (V) A Detachable lid mounted 11/2" size axial uniformity cigarette smoke mixing fan. (VI) A medium size water bath with mounting bracket for the water circulator. (VII) A 1/2' thick Plexiglas tray with brackets for the puff pump and holder for cigarette ash collector.

This machine as described can be substituted with similar commercially-available smoking machines such as the kind available from TSE systems (www.tse-systems.com).