

Rapid Viscoelastic Characterization of Airway Mucus Using a Benchtop Rheometer

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Materials

Name	Company	Catalog Number	Comments
Capillary Pistons Tips	Gilson	CP1000	
Discovery Hybrid Rheometer-3	TA Instruments		DHR-3 Bulk Rheometer manufactured by TA Instruments in New Castle, DE: Used to preform rheological tests.
Graphing Software	GraphPad Prism		GraphPad Software (San Diego, CA) used for data analysis
Microcentrifuge Tube	Costar	3621	
Peltier plate	TA Instruments		Temperature control system manufactured by TA Instruments in New Castle, DE
Polyethylene oxide	Sigma	372838	8 MDa polymer used as mucus simulant
Positive Displacement Pipette	Gilson	M1000	Pipette used for handling viscous solutions
Rheomuco	Rheonova		Benchtop Rheometer manufactured by Rheonova in France: Used to preform rheological tests.
Rough Lower Geometries	Rheonova	D-1811-007	25mm Diameter
Rough Upper Geometries	Rheonova	U-1811-007	25mm Diameter
Smooth Upper Parallel Plate	TA Instruments		20mm Diameter
tris(2-carboxyethyl)phosphine	Sigma	646547-10X1ML	TCEP: Potent reducing agent.