

Materials List for:

A Protocol for the Production of Gliadin-cyanoacrylate Nanoparticles for Hydrophilic Coating

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Materials

Name	Company	Catalog Number	Comments
Ethyl cyanoacrylate (ECA) monomer	K&R International (Laguna Niguel, CA)	I-1605	Any pure ECA can be used.
Gliadin	MGP Ingredients, Inc (Atchison, KS)	Gift from the company	Gliadin can be purchased from Sigma-Aldrich (cat #: G3375-25G). Instead of gliadin, any commercial gluten can be used.
HCl	Any		Any reagent grade chemical can be used.
Acetone	Any		Any reagent grade chemical can be used.
Methanol	Any		Any reagent grade chemical can be used.
Ethanol (100%)	Any		Any reagent grade chemical can be used.
Filter paper	Any		Any grade filter paper larger than 10 cm can be used.
Cell culture square dish	Any		Any dish larger than 20 x 20 cm can be used.
Coffee grinder	Any		Any coffee grinder can be used.
Rotary evaporator	Any		Any rotary evaporator can be used.
Freeze Dryer	Any		Any freeze dryer that can reach -70 °C can be used.
Centrifuge	Any		Any centrifuge that can apply 1,000 x g can be used.
Magnetic stirrer	Any		Any magnetic stirrer that can turn spin bar to 1,000 rpm can be used.
Dynamic Light Scattering (DLS)	Brookhaven Instruments Corporation	NanoBrook Omni Zeta Potential Analyzer	DLS from any company can be used.
Scanning Electron Microscope (SEM)	Carl Zeiss Inc.		Any SEM can be used.
Dynamic Contact Angle (DCA)	Thermo Cahn Instruments		Any DCA can be used.