

Materials List for:

Detection of Endotoxin in Nano-formulations Using Limulus Amoebocyte Lysate (LAL) Assays

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Materials

Name	Company	Catalog Number	Comments
Turbidity LAL Assay			
Sodium Hydroxide	Sigma	S2770	When needed, it is used to adjust sample pH to be between 6-8
Hydrochloric acid	Sigma	H9892	When needed, it is used to adjust sample pH to be between 6-8
LAL Reagent	Associates of Cape Cod	T0051	This reagent can be used with turbidity assay only
Control Endotoxin Standard	Associates of Cape Cod	E0005	This reagent can be used with turbidity and gel-clot assays
LAL grade water	Associates of Cape Cod	WP0501	This reagent can be used with any LAL format
Glucashield Buffer	Associates of Cape Cod	GB051-25	Used to prevent false-positive response from beta-glucans
Disposable endotoxin-free glass dilution tubes 12 x 75 mm	Associates of Cape Cod	TB240	These tubes can be used with all three assays
Disposable endotoxin-free glass reaction tubes 8 x 75 mm	Associates of Cape Cod	TK100	These tubes can be used with turbidity and chromogenic assays
Pyrogen-free tips with volumes 0.25 and 1.0 mL	RAININ	PPT25, PPT10	Tips and pipettes may adsorb endotoxin and release leachables which interfere with LAL assay. These RAININ tips are used because their optimal performance in the LAL assay was verified and confirmed
Pyrogen-free microcentrifuge tubes, 2.0 mL	Eppendorf	22600044	Other equivalent supplies can be used
Pyrogen-free combitips, 5mL	Eppendorf	30089669	Other equivalent supplies can be used
Repeat pipettor	Eppendorf	4982000020	Other equivalent supplies can be used
Microcentrifuge	any brand		Any brand can be used
Refrigerator, 2-8 C	any brand		Any brand can be used
Vortex	any brand		Any brand can be used
Freezer, -20 C	any brand		Any brand can be used
Pyros Kinetix or Pyros Kinetix Flex reader	Associates of Cape Cod	PKF96	Other instruments can be used. However, LAL reagents and endotoxin standards used in this assay may require optimization. When other instrumentation is used, please

			refer to the instrument and LAL kit manufacturers for instructions
Chromogenic LAL Assay			
Pyrochrome LAL Reagent	Associates of Cape Cod	CG1500-5	This reagent is specific to the Chromogenic Assay
Control Endotoxin Standard	Associates of Cape Cod	EC010	This standard is different than that used for turbidity and gel-clot LALs; it is optimized for optimal performance in the chromogenic assay
Sodium Hydroxide	Sigma	S2770	When needed, it is used to adjust sample pH to be between 6-8
Hydrochloric acid	Sigma	H9892	When needed, it is used to adjust sample pH to be between 6-8
LAL grade water	Associates of Cape Cod	WP0501	This reagent can be used with any LAL format
Glucashield Buffer	Associates of Cape Cod	GB051-25	Used to prevent false-positive response from beta-glucans
Disposable endotoxin-free glass dilution tubes 12 x 75 mm	Associates of Cape Cod	TB240	These tubes can be used with all three assays
Disposable endotoxin-free glass reaction tubes 8 x 75 mm	Associates of Cape Cod	TK100	These tubes can be used with turbidity and chromogenic assays
Pyrogen-free tips with volumes 0.25 and 1.0 ml	RAININ	PPT25, PPT10	Tips and pipettes may adsorb endotoxin and release leachables which interfere with LAL assay. These RAININ tips are used because their optimal performance in the LAL assay was verified and confirmed
Pyrogen-free microcentrifuge tubes, 2.0 mL	Eppendorf	22600044	Other equivalent supplies can be used
Pyrogen-free combitips, 5mL	Eppendorf	30089669	Other equivalent supplies can be used
Repeat pipettor	Eppendorf	4982000020	Other equivalent supplies can be used
Microcentrifuge	any brand		Any brand can be used
Refrigerator, 2-8 C	any brand		Any brand can be used
Vortex	any brand		Any brand can be used
Freezer, -20 C	any brand		Any brand can be used
Pyros Kinetix or Pyros Kinetix Flex reader	Associates of Cape Cod	PKF96	Other instruments can be used. However, LAL reagents and endotoxin standards used in this assay may require optimization. When other instrumentation is used, please refer to the instrument and LAL kit manufacturers for instructions
Gel-Clot LAL Assay			
LAL Reagent	Associates of Cape Cod	G5003	This reagent is specific to the gel-clot assay
Control Endotoxin Standard	Associates of Cape Cod	E0005	This reagent can be used with turbidity and gel-clot assays
Sodium Hydroxide	Sigma	S2770	When needed, it is used to adjust sample pH to be between 6-8
Hydrochloric acid	Sigma	H9892	When needed, it is used to adjust sample pH to be between 6-8

LAL grade water	Associates of Cape Cod	WP0501	This reagent can be used with any LAL format
Glucashield Buffer	Associates of Cape Cod	GB051-25	Used to prevent false-positive response from beta-glucans
Disposable endotoxin-free glass dilution tubes 12 x 75 mm	Associates of Cape Cod	TB240	These tubes can be used with all three assays
Disposable endotoxin-free glass reaction tubes 10 x 75 mm	Associates of Cape Cod	TS050	These tubes are for use with the gel-clot assay
Pyrogen-free tips with volumes 0.25 and 1 mL	RAININ	PPT25, PPT10	Tips and pipettes may adsorb endotoxin and release leachables which interfere with LAL assay. These RAININ tips are used because their optimal performance in the LAL assay was verified and confirmed
Pyrogen-free microcentrifuge tubes, 2.0 mL	Eppendorf	22600044	Other equivalent supplies can be used
Pyrogen-free combitips, 5mL	Eppendorf	30089669	Other equivalent supplies can be used
Repeat pipettor	Eppendorf	4982000020	Other equivalent supplies can be used
Microcentrifuge	any brand		Any brand can be used
Refrigerator, 2-8 C	any brand		Any brand can be used
Vortex	any brand		Any brand can be used
Freezer, -20 C	any brand		Any brand can be used
Water bath, 37 C	any brand		Any brand can be used, however, it is important either to switch off water circulation or use non-circulating water bath because water flow will affect clot formation and lead to false-negative results