

Materials List for:

Fabrication of Electrochemical-DNA Biosensors for the Reagentless Detection of Nucleic Acids, Proteins and Small Molecules

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Materials

Name	Company	Catalog Number	Comments
Gold Disk Electrodes	CH Instruments, Inc.	CHI101	Can be re-used
Synthetic Probe DNA	Biosearch Technologies	Custom	
Synthetic Target DNA	Sigma-Aldrich	Custom	
Mercaptohexanol	Sigma-Aldrich	725226-1G	Store in cool dark place
Platinum Electrode	BASi	MW-1032	Can be re-used
Ag/AgCl Reference	BASi	MF-2052	Can be re-used
Polishing Cloth	Buehler	40-7212	
Alumina Polish	Buehler	40-6325-016	
Phosphate buffered saline Buffer, pH 7.4	Sigma-Aldrich	P7059-1L	
CH Instruments 605A	CH Instruments, Inc.	605A	Use any potentiostat
Newborn Calf Serum	Sigma-Aldrich	N4637-500ML	Stored frozen
NanoDrop	Fisher Scientific	ND-2000	Use any UV-Vis
PCR Mix	Bio-Rad	170-8862	Stored frozen
Cocaine	Sigma-Aldrich	C5776	DEA License Required
Procaine	Sigma-Aldrich	P9879	Substitute for Cocaine
Anti-Flag Antibody	Sigma-Aldrich	F1804-1mg	