

Materials List for:

DNA Staining Method Based on Formazan Precipitation Induced by Blue Light Exposure

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Materials

Name	Company	Catalog Number	Comments
Nitro blue tetrazolium	Gold Biotechnology	298-83-9	reagent used in the staining
SYBR Green I 10000X	Thermo-Fisher	S7563	reagent used in the staining
Gel extraction kit	QIAGEN	28704	used to extract plasmid from the gel in integrity assay
DNA ladder	Thermo-Fisher	SM 1331	used to make calibration curves and as reference to cut band in integrity assay
Agar Agar	Merck		used to make LB-ampicillin culture plates
sodium chloride	Merck	1064045000	used to make LB-ampicillin culture plates
yeast extract	Becton, Dickinson and Company	212750	used to make LB-ampicillin culture plates
peptone	Merck	72161000	used to make LB-ampicillin culture plates
TEMED	AMRESCO	761	used to make polyacrylamide gels
ammonium persulfate	Calbiochem	2310	used to make polyacrylamide gels
acrylamide	invitrogen	15512-023	used to make polyacrylamide gels
bisacrylamide	SIGMA	146072	used to make polyacrylamide gels
Tris-base	Merck	1083821000	used to make TAE buffer and non-denaturing polyacrylamide gel tris-HCl buffer
EDTA	J.T. Baker	8993-01	used to make TAE buffer
Acetic acid	Merck	1,000,632,500	used to make TAE buffer
agarose	Merck	16802	used to make TAE buffer
spectrophotometer	Tecan	infinite 200 pro	used to quantify DNA plasmid
water purification unit	Merck	Elix 100	use to make water type 1 (ASTM) used in spectrophotometry and DNA dilutions\
distilled water		-	used in gels, culture medium, stainings and general solutions
HCl	J.T. Baker	9535-03	used to make non-denaturing polyacrylamide gel tris-HCl buffer
6X DNA loading dye	Thermo-Fisher	R0610	
5 mm Blue LED	Jinyuan electronics	SP-021	light source used in integrity assay
protoboard	KANDH	KH102	light source support and circuit
9 V battery	Duracell	-	used to power the LED's
horizontal electrophoresis chamber	Biorad	1704486EDU	used to make and run agarose gel in integrity assay

vertical electrophoresis kit	Biorad	1658002EDU	used to run polyacrylamide gels in calibration curves
power supply	Biorad	1645050	used to power the electrophoresis