

Application of DNA Fingerprinting using the *D1S80* Locus in Lab Classes

Meike Siebers^{*1}, Agatha Walla^{*1,2}, Thea Rütjes¹, Moritz-Fabian Müller⁴, Maria von Korff^{1,2,3}

¹Institute of Plant Genetics, Heinrich-Heine-University ²Cluster of Excellence on Plant Sciences "SMART Plants for Tomorrow's Needs" ³Max Planck Institute for Plant Breeding Research ⁴IBG-1: Biotechnology, Forschungszentrum Jülich GmbH

*These authors contributed equally

Corresponding Author

Meike Siebers

meike.siebers@hhu.de

Citation

Siebers, M., Walla, A., Rütjes, T., Müller, M.F., von Korff, M. Application of DNA Fingerprinting using the *D1S80* Locus in Lab Classes. *J. Vis. Exp.* (173), e62305, doi:10.3791/62305 (2021).

Date Published

July 17, 2021

DOI

10.3791/62305

URL

jove.com/video/62305

Materials

Name	Company	Catalog Number	Comments
1.5 mL microcentrifuge tube	Sarstedt	72,706	autoclaved
2 mL microcentrifuge tube	Sarstedt	7,26,95,500	autoclaved
2-propanol	Fisher chemical	PI7508/17	
5x PCR buffer	Promega	M7845	
Acetic acid	Sigma/Merck	A6283-500ML	
Agarose	BioBudget	10-35-1020	
Buccal swabs	BioBudget	57-BS-05-600	
Centrifuge	Eppendorf		5430
Combs	BioRad		
dNTPs (10 mM)	Invitrogen	R0192	
EDTA	Carl Roth	8043.1	
Ethanol	Honeywell	32221-2.5L	
Gel caster	BioRad		
Gel chamber	BioRad		SubCell GT
Gel Doc XR+	BioRad		
Geltray	BioRad		SubCell GT
GeneRuler 50 bp DNA Ladder	Thermo Fisher	SM0371	
Go-Taq Polymerase	Promega	M7845	
Heating block	Eppendorf	Thermomixer	1.5 mL and 2 mL
Microwave	Sharp		R-941STW
peqGreen	VWR	732-3196	
Pipettes	Gilson		1000 µL, 200 µL, 20 µL, 2 µL
Potassium acetate	Arcos Organics	217100010	
PowerPac power supply	BioRad		100-120/220-240V
Primers	Sigma/Merck		
Scale	Kern		PCB 2.5 kg

SDS	Arcos Organics	218591000	
Shaker	IKA labortechnik		IKA RH basic
Tabletop centrifuge	myFuge		
Thermal Cycler	BioRad		C100 Touch
Tris	VWR	103156x	
Vortex mixer	LMS		VTX-3000L