

Materials List for:

Comparison of Tobacco Host Cell Protein Removal Methods by Blanching Intact Plants or by Heat Treatment of Extracts

Johannes F. Buyel^{1,2}, Jürgen Hubbuch³, Rainer Fischer^{1,2}

¹Fraunhofer Institute for Molecular Biology and Applied Ecology IME, Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e. V.

²Institute for Molecular Biotechnology, RWTH Aachen University

³Department of Biomolecular Separation Engineering, Karlsruhe Institute of Technology (KIT)

Correspondence to: Johannes F. Buyel at johannes.buyel@ime.fraunhofer.de

URL: <https://www.jove.com/video/54343>

DOI: [doi:10.3791/54343](https://doi.org/10.3791/54343)

Materials

Name	Company	Catalog Number	Comments
2100P Portable Turbidimeter	Hach	4650000	Turbidimeter
Amine Coupling Kit	GE Healthcare	BR100050	SPR chip coupling kit
Autoclaving basket	Nalgene	6917-0230	Basket for leaf blanching
Biacore T200	GE Healthcare	28-9750-01	SPR device
Bio Cell Analyser BCA 003 R&D with 3D ORM	Sequip	n.a.	Particle size analyzer
Blender	Waring	800EG	Blender
BP-410	Furh	2632410001	Bag filter
Centrifuge 5415D	Eppendorf	5424 000.410	Centrifuge
Centrifuge tube 15 ml	Labomedic	2017106	Reaction tube
Centrifuge tube 50 ml self-standing	Labomedic	1110504	Reaction tube
CM5 chip	GE Healthcare	BR100012	Chip for SPR measurements
Cuvette 10 x 10 x 45	Sarsted	67.754	Cuvette for Zetasizer Nano ZS
Design-Expert(R) 8	Stat-Ease, Inc.	n.a.	DoE software
Disodium phosphate	Carl Roth GmbH	4984.3	Media component
Ferty 2 Mega	Kammlott	5.220072	Fertilizer
Forma -86C ULT freezer	ThermoFisher	88400	Freezer
Greenhouse	n.a.	n.a.	For plant cultivation
Grodan Rockwool Cubes 10 x 10 cm	Grodan	102446	Rockwool block
Twentey-loop heat exchanger (4.8 m length)	n.a. (custom design)	n.a.	Heat exchanger
HEPES	Carl Roth GmbH	9105.3	Media component
K200P 60D	Pall	5302303	Depth filter layer
KS50P 60D	Pall	B12486	Depth filter layer
Lauda E300	Lauda Dr Wobser GmbH	Z90010	Water bath thermostat
L/S 24	Masterflex	SN-06508-24	Tubing
mAb 5.2	American Type Culture Collection	HB-9148	Vax8 specific antibody
Masterflex L/S	Masterflex	HV-77921-75	Peristaltic pump
Miracloth	Labomedic	475855-1R	Filter cloth
MultiLine Multi 3410 IDS	WTW	WTW_2020	pH meter / conductivity meter
Osram cool white 36 W	Osram	4930440	Light source
Phytotron	Ilka Zell	n.a.	For plant cultivation

Sodium disulfite	Carl Roth GmbH	8554.1	Media component
Sodium chloride	Carl Roth GmbH	P029.2	Media component
Stainless-steel vessel; 0.7 kg 2.0 L; height 180 mm; diameter 120 mm	n.a. (custom design)	n.a.	Container for heat precipitation
Synergy HT	BioTek	SIAFRT	Fluorescence and spectrometric plate reader
VelaPad 60	Pall	VP60G03KNH4	Filter housing
Zetasizer Nano ZS	Malvern	ZEN3600	DLS particle size distribution measurement
Zetasizer Software v7.11	Malvern	n.a.	Software to operate the Zetasizer Nano ZS device