

Materials List for:

Construction of Models for Nondestructive Prediction of Ingredient Contents in Blueberries by Near-infrared Spectroscopy Based on HPLC Measurements

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URL: <https://www.jove.com/video/53981>

DOI: [doi:10.3791/53981](https://doi.org/10.3791/53981)

Materials

Name	Company	Catalog Number	Comments
FT-NIR spectrophotometer	Bruker Optics GmbH	MPA	
High-Performance Liquid Chromatography	Shimadzu Corporation	228-45041-91, 228-45000-31, 228-45018-31	For sugar analysis
		223-04500-31, 228-45010-31, 228-45095-31	Refractive Index Detector
High-Performance Liquid Chromatography	Shimadzu Corporation	228-45041-91, 228-45003-31, 228-45000-31	For organic acid analysis
		228-45018-31, 228-45010-31, 223-04500-31	Ultraviolet-Visible Detector
High-Performance Liquid Chromatography	Shimadzu Corporation	228-45041-91, 228-45018-31, 228-45000-31	For anthocyanin analysis
		228-45012-31, 228-45119-31, 228-45005-31	Photodiode Array Detector
		228-45009-31	
pH meter	Mettler-Toledo	30019028	S220, Automatic temperature compensation
Ultra-pure water treatment equipment	ORGANO Corporation	ORG-ULXXM1; PRA-0015-0V0	PURELAB ultra; PURELITE
Biomedical Freezers	SANYO	2-6780-01	MDF-U338
Ultra-Low Temperature Freezer	Panasonic healthcare Co.,Ltd.	KM-DU73Y1	-80 °C
Vacuum lyophilizer	IWAKI GLASS Co.,Ltd	119770	DRC-3L; FRD-82M
Homogenizer	Microtec Co., Ltd.	Physcotron	
Ultracentrifuge	Hitachi Koki Co.,Ltd	S204567	CF15RXII
Mini-centrifuge	LMS CO.,LTD.	KN3136572	MCF-2360
Centrifuge	Kokusan Co.,Ltd	2-5534-01	H-103N
Filter Paper	Advantec	1521070	5B, Equivalent to Whatman 40
Sep-Pak C18 column	Waters Corporation Milford	WAT020515	
Sep-Pak CM column	Waters Corporation Milford	WAT020550	
Sep-Pak QMA column	Waters Corporation Milford	WAT020545	
Centrifugal Filter Unit	Merck Millipore Corporation	R2SA18503	PVDF, 0.45 µm
Microtube	As One Corporation	1-1600-02	PP, 2 ml
Syringe Filter	GE Healthcare CO.,LTD.	6788-1304	PP, 0.45 µm
Sucrose	Wako Pure Chemical Industries,Ltd	194-00011	Reagent-grade
Glucose	Wako Pure Chemical Industries,Ltd	049-31165	Reagent-grade
Fructose	Wako Pure Chemical Industries,Ltd	123-02762	Reagent-grade

Citric acid	Wako Pure Chemical Industries,Ltd	036-05522	Reagent-grade
Malic acid	Wako Pure Chemical Industries,Ltd	355-17971	Reagent-grade
Succinic acid	Wako Pure Chemical Industries,Ltd	190-04332	Reagent-grade
Quinic acid	Alfa Aesar, A Johnson Matthey Company	10176328	Reagent-grade
Phosphoric acid	Wako Pure Chemical Industries,Ltd	162-20492	HPLC-grade
Trifluoroacetic acid	Wako Pure Chemical Industries,Ltd	208-02746	Reagent-grade
Methanol	Wako Pure Chemical Industries,Ltd	131-01826	Reagent-grade
Acetonitrile	Wako Pure Chemical Industries,Ltd	015-08633	HPLC-grade
Grade cyanidin-3-O-glucoside chloride	Wako Pure Chemical Industries,Ltd	306-37661	HPLC-grade
Software for analyses	Bruker Optics GmbH	OPUS ver. 6.5	
Software for preprocessing	Microsoft	Excel powered by Visual Basic for Applications	
Software for construction of models		Freemat 4.0	http://freemat.sourceforge.net/