

Materials List for:

# Extraction and Purification of Polyphenols from Freeze-dried Berry Powder for the Treatment of Vascular Smooth Muscle Cells *In Vitro*

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## Materials

Name	Company	Catalog Number	Comments
Angiotensin II	Sigma-Aldrich, Inc.	A9525-10MG	Treatment of VSMCs
β-actin	Sigma-Aldrich, Inc.	A2228	Primary antibody (1:5000)
Blackberry fruit	Mercer Foods		Freeze-dried blackberry powder
Catalase	Calbiochem	219010	Primary antibody (1:1000)
Chloroform	Biotech Grd, Inc.	97064-678	Preparation of purified polyphenol extracts
Dulbecco's Modified Eagle Medium (DMEM)	Mediatech, Inc.	10-014-CV	Culture of VSMCs
Ethanol (absolute molecular biology grade)	Sigma-Aldrich, Inc.	E7023-500ML	Preparation of polyphenol extracts
Ethylacetate	Sigma-Aldrich, Inc.	439169	Preparation of purified polyphenol extracts
ERK1/2	Cell Signaling Technology, Inc.	9102S	Primary antibody (1:500)
EDTA, 500 mM, pH 8.0	Teknova, Inc.	E0306	Lysis buffer
Freeze-Dryer	Labconco	VirTis Benchtop K	Preparation of polyphenol extracts
Fetal Bovine Serum (FBS)	Seradigm	1400-500	Cell culture
HEPES	Sigma-Aldrich, Inc.	H3375	Lysis buffer
NaCl	EMD Millipore, Inc.	7760	Lysis buffer
NaF	J.T.Baker, Inc.	3688-01	Lysis buffer
Na <sub>3</sub> VO <sub>4</sub>	Sigma-Aldrich, Inc.	450243	Lysis buffer
Na <sub>4</sub> P <sub>2</sub> O <sub>7</sub> , decahydrate	Sigma-Aldrich, Inc.	S-9515	Lysis buffer
phospho ERK1/2	Cell Signaling Technology, Inc.	9101S	Primary antibody (1:1000)
Protease inhibitor cocktail	Sigma-Aldrich, Inc.	P8340-5ml	Lysis buffer
Protein assay dye reagent	Bio-Rad Laboratories, Inc.	500-0006	Protein concentration Measurement
PVDF transfer membrane	Thermo Scientific, Inc.	88518	Western blots
Rotatory Evaporator	Buchi Labortechnik	Rotavapor R3000	Preparation of polyphenol extracts
Sterile water	Mediatech, Inc.	25-055-CV	Preparation of polyphenol extracts
Sonicator	QSonica, LLC	Q125	Preparation of cell extracts
SOD2	Enzo Life Sciences, Inc.	ADI-SOD-110-F	Primary antibody (1:1000)
Triton-X-100	Sigma-Aldrich, Inc.	X100	Western blots
Whatman #2 filter paper	GE Healthcare, Inc.	28317-241	Preparation of polyphenol extracts