

Materials List for:

Improving Strength, Power, Muscle Aerobic Capacity, and Glucose Tolerance through Short-term Progressive Strength Training Among Elderly People

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Materials

Name	Company	Catalog Number	Comments
Western blot			
Pierce 660 nm Protein Assay Kit	Thermo Scientific, Rockford, IL, USA	22662	
SuperSignal West Femto Maximum Sensitivity Substrate	Thermo Scientific	34096	
Halt Protease Inhibitor Cocktail (100x)	Thermo Scientific	78429	
Restore PLUS Western Blot Stripping Buffer	Thermo Scientific	46430	
Pierce Reversible Protein Stain Kit for PVDF Membranes	Thermo Scientific	24585	
10 st - 4–20% Criterion TGX Gel, 18 well, 30 µL	Bio-Rad Laboratories, Richmond, CA, USA	567-1094	
Immun-Blot PVDF Membrane	Bio-Rad	162-0177	
Precision Plus Protein Dual Color Standards	Bio-Rad	161-0374	
2x Laemmli Sample Buffer	Bio-Rad	161-0737	
10x Tris/Glycine	Bio-Rad	161-0771	
2-Mercaptoethanol	Bio-Rad	161-0710	
Tween 20	Bio-Rad	P1379-250ML	
Band analysis with Quantity One version 4.6.3 software	Bio-Rad		
1% phosphatase inhibitor cocktail	Sigma-Aldrich, Saint Louis, Missouri, USA		
Antibodies			
mTOR (1:1,000)	Cell Signaling, Danvers, Massachusetts, USA	2983	
Akt (1:1,000)	Cell Signaling, Danvers	9272	
Secondary anti-rabbit and anti-mouse HRP-linked (1:10,000)	Cell Signaling, Danvers		
Citrate synthase (CS) (1:1,000)	Gene tex, San Antonio, California, USA		
OXPHOS (1:1,000)	Abcam, Cambridge, UK		
Equipment - Analysis of muscle samples			
Bullet Blender 1.5 for homogenizing	Next Advance, New York, USA		

Plate reader	Tecan infinite F200 pro, Männedorf, Switzerland		
Histochemistry			
Mayer hematoxylin	HistoLab, Västra Frölunda, Sweden	1820	
Oil Red o	Sigma-Aldrich, Saint Louis, Missouri, USA	00625-25y	
NaCl	Sigma-Aldrich	793566-2.5 kg	
Cobalt Chloride	Sigma-Aldrich	60818-50G	
Amylase	Sigma-Aldrich	A6255-25MG	
ATP	Sigma-Aldrich	A2383-5G	
Glycine	VWR-chemicals / VWR-international, Spånga, Sweden	101196X	
Calcium Chloride	VWR-chemicals / VWR-international	22328.262	
Iso-pentane	VWR-chemicals / VWR-international	24872.298	
Etanol 96%	VWR-chemicals / VWR-international	20905.296	
NaOH	MERCK, Stockholm, Sweden	1.06498.1000	
Na acetate	MERCK	1.06268.1000	
KCl	MERCK	1.04936.1000	
Ammonium Sulphide	MERCK	U1507042828	
Acetic acid 100%	MERCK	1.00063.2511	
Schiffs' Reagent	MERCK	1.09033.0500	
Periodic acid	MERCK	1.00524.0025	
Chloroform	MERCK	1.02445.1000	
pH-meter LANGE	HACH LANGE GMBH, Dusseldorf, Germany		
Light microscope	Olympus BH-2, Olympus, Tokyo, Japan		
Cryostat Leica CM1950	Leica Microsystems, Wetzlar, Germany		
Leica software Leica Qwin V3	Leica Microsystems		
Gel Doc 2000 - Bio-Rad, camera setup	Bio-Rad Laboratories AB, Solna, Sweden		
Software program Quantifit One - 4.6 (version 4.6.3; Bio Rad)	Bio-Rad Laboratories AB, Solna, Sweden		
Oral glucos tolerance test, OGGT			
Glukos APL 75 g	APL, Stockholm, Sweden	323,188	
Automated analyser Biosen 5140	EKF Diagnostics, Barleben, Germany		
Insulin and C-peptide in plasma kit ELISA	Mercodia AB, Uppsala Sweden	10-1132-01, 10-1134-01	
Plate reader	Tecan infinite F200 pro, Männedorf, Switzerland		
Further equipment			
Measures of fat-free mass	FFM-Tanita T5896, Tanita, Tokyo, Japan		
Strength training equipment for all training exercises	Cybox International Inc., Medway, Massachusetts, USA		

Cycle ergometer	Monark Ergometer 893E, Monark Exercises, Varberg, Sweden		
Heart rate monitor RS800, Polar	Polar Electro OY, Kampele, Finland		
Oxycin-Pro - automatic ergo-spirometric device	Erich Jaeger GmbH, Hoechberg, Germany		
Isokinetic dynamometer, Isomed 2000, knee muscle strength	D&R Ferstl GmbH, Henau, Germany		
CED 1401 data acquisition system and Signal software	Cambridge Electronic Design, Cambridge, UK		
Software for muscle strength analysis, Spike 2, version 7	Signal Hound, LA Center, WA, USA		
Statistica software for statistical analyses	Statistica, Stat soft. inc, Tulsa, Oklahoma, USA		
Muscle biopsy equipment			
Weil Blakesley conchotome	Wisex, Mölndal, Sweden		
Local anesthesia	Carbocain, 20 mL, 20 mg/mL; Astra Zeneca, Södertälje, Sweden	169,367	
Surgical Blade	Feather Safety Razor CO, LTD, Osaka, Japan	11048030	