

Materials List for:

# Species Determination and Quantitation in Mixtures Using MRM Mass Spectrometry of Peptides Applied to Meat Authentication

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URL: <https://www.jove.com/video/54420>

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## Materials

Name	Company	Catalog Number	Comments
Uniprot database	<a href="http://www.uniprot.org">www.uniprot.org</a>		Freely accessible database of protein sequences
Skyline software	<a href="http://www.skyline.gs.washington.edu">www.skyline.gs.washington.edu</a>		Free software to download that enables the creation of targeted methods for proteomic studies, peptide and fragment prediction
Ammonium bicarbonate	Sigma-Aldrich Co Ltd, Gillingham, UK <a href="http://www.sigmaaldrich.com">www.sigmaaldrich.com</a>	O9830	
Methanol, HPLC grade	Fisher Scientific, Loughborough, UK <a href="http://www.fisher.co.uk">www.fisher.co.uk</a>	10674922	
Acetonitrile, HPLC grade	Fisher Scientific, Loughborough, UK <a href="http://www.fisher.co.uk">www.fisher.co.uk</a>	10010010	
Urea	Sigma-Aldrich Co Ltd, Gillingham, UK <a href="http://www.sigmaaldrich.com">www.sigmaaldrich.com</a>	U5378	
Trypsin(from bovine pancreas treated with TPCK)	Sigma-Aldrich Co Ltd, Gillingham, UK <a href="http://www.sigmaaldrich.com">www.sigmaaldrich.com</a>	T1426	
Formic acid	Sigma-Aldrich Co Ltd, Gillingham, UK <a href="http://www.sigmaaldrich.com">www.sigmaaldrich.com</a>	F0507	
Coomassie Plus Protein Assay Reagent	Thermo Fisher Scientific <a href="http://www.thermofisher.com">www.thermofisher.com</a>	1856210	
Protein standard	Sigma-Aldrich Co Ltd, Gillingham, UK <a href="http://www.sigmaaldrich.com">www.sigmaaldrich.com</a>	P0914	
Ultra Turrax homogeniser T25	Fisher Scientific, Loughborough, UK <a href="http://www.fisher.co.uk">www.fisher.co.uk</a>	13190693	
Edmund and Buhler KS10 lab shaker			
Heraeus Fresco 17 Centrifuge	Thermo Fisher Scientific <a href="http://www.thermoscientific.com">www.thermoscientific.com</a>	75002420	
Vacuum centrifuge RC 1022	Jouan		
Plate Reader			
Strata-X 33u polymeric reversed-phase cartridges 60 mg/3 ml tubes	Phenomenex, Macclesfield, UK	8B-S100-UBJ	
4000 QTrap triple-quadrupole mass spectrometer	AB Sciex, Warrington, UK <a href="http://www.sciex.com">www.sciex.com</a>		
1200 rapid resolution LC system	Agilent, Stockport, UK		
XB C18 reversed-phase capillary column (100 mm x 2.1 mm, 2.6 µm particle size)	Phenomenex, Macclesfield, UK <a href="http://www.phenomenex.com">www.phenomenex.com</a>		

Analyst 1.6.2 software	AB Sciex, Warrington, UK www.sciex.com		QTrap data acquisition and analysis, including peak area integration
Autosampler vials			