

Materials List for

Resin-Assisted Capture Coupled with Isobaric Tandem Mass Tag Labeling for Multiplexed Quantification of Protein Thiol Oxidation

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Materials

Name	Company	Catalog Number	Comments
2-(Pyridyldithio)ethylamine hydrochloride	Med Chem Express	HY-101794	Reagent for in-house resin synthesis
2.0 mL LoBind centrifuge tubes	Eppendorf	22431048	
5.0 mL LoBind centrifuge tubes	Eppendorf	30108310	
5.0 mL round bottom tubes	Falcon	352054	
Acetone	Fisher Scientific	A949-1	
Acetonitrile	Sigma Aldrich	34998	
Activated Thiol-Sepharose 4B	Sigma Aldrich	T8512	Potential replacement for thiol-affinity resin
Amicon Ultra 0.5 mL centrifugal filter	Millipore Sigma	UFC5010BK	
Ammonium bicarbonate	Sigma Aldrich	09830	
Bicinchonic acid (BCA)	Thermo Scientific	23227	Protein Assay Reagent
Centrifuge	Eppendorf	5810R	
Centrifuge	Eppendorf	5415R	
Dithiothreitol (DTT)	Thermo Scientific	20291	
EDTA	Sigma Aldrich	E5134	
HEPES buffer	Sigma Aldrich	H4034	
Homogenizer	BioSpec Products	985370	
Iodoacetimide (IAA)	Sigma Aldrich	I1149	
N-ethylmaleimide	Sigma Aldrich	4259	
NHS-Activated Sepharose 4 Fast Flow	Cytiva	17-0906-01	Reagent for in-house resin synthesis
QIAvac 24 Plus vacuum manifold	Qiagen	19413	
Sodium chloride	Sigma Aldrich	S3014	
Sodium dodecyl sulfate (SDS)	Sigma Aldrich	L6026	
Sonicator	Branson	1510R-MT	

Spin columns	Thermo Scientific	69705	
Strata C18-E reverse phase columns	Phenomenex	8B-S001-DAK	Peptide desalting
Thermomixer	Eppendorf	5355	
Thiopropyl Sepharose 6B	GE Healthcare	17-0420-01	Thiol-affinity resin; *Production of Thiopropyl Sepharose 6B resin has been discontinued by the manufacturer (see protocol for details).
TMT isobaric labels (16 plex)	Thermo Scientific	A44522	Peptide labeling reagent; available in multiple formats
Triethylammonium bicarbonate buffer (TEAB)	Sigma Aldrich	T7408	
Trifluoroacetic acid (TFA)	Sigma Aldrich	T6508	
Triton X-100	Sigma Aldrich	T8787	
Trypsin	Promega	V5820	
Urea	Sigma Aldrich	U5378	
Vacufuge Plus speedvac	Eppendorf	22820001	vacuum concentrator
Vortex mixer	Scientific Industries	SI-0236	