

Materials List for:

Measuring Interactions of Globular and Filamentous Proteins by Nuclear Magnetic Resonance Spectroscopy (NMR) and Microscale Thermophoresis (MST)

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Materials

Name	Company	Catalog Number	Comments
Monolith NT.115, includes control and analysis software	NanoTemper Technologies	MO-G008	Instrument for microscal thermophoresis
His-Tag Labeling Kit RED-Tris-NTA	NanoTemper Technologies	MO-L008	RED-tris-NTA dye for MST
Standard capillaries	NanoTemper Technologies	MO-K022	capillaries for MST
HisTrap HP, 5 mL	GE Healthcare	17524801	IMAC column
HisPur Ni-NTA resin, 100 mL	Thermo Fisher Scientific	88222	IMAC resin
HiLoad 16/600 Superdex 75 pg	GE Healthcare	28989333	SEC column
TEV protease	Sigma Aldrich	T4455	cleavage of his tag from E-PRD
BL21(DE3) Competent <i>E. coli</i>	New England Biolabs	C2527H	cells for protein expression
cOmplete Protease Inhibitor Cocktail Tablets EDTA-Free	Sigma Aldrich	11873580001	protease inhibitors for protein purification by IMAC
TCEP, Tris(2-carboxyethyl)phosphine hydrochloride	Sigma Aldrich	C4706	reducing agent for protein purification
Reagents (HEPES, NaCl, etc)	Sigma Aldrich	various	Preparation of media and buffers
Ammonium chloride (¹⁵ N, 99%)	Cambridge Isotope Laboratories	NLM-467	isotope labelling for NMR
D ₂ O, Deuterium Oxide (D, 99.8%)	Cambridge Isotope Laboratories	DLM-2259	NMR sample preparation
DSS, Sodium 2,2-dimethyl-2-silapentane-5-sulfonate-D6 (D,98%)	Cambridge Isotope Laboratories	DLM-8206	reference for NMR
Precision 5 mm NMR Tubes, 7" long	SJM/Deuterotubes	BOROECO-5-7	NMR tubes
NMR spectrometer (14.1 Tesla)	Bruker		acquisition of NMR data
TCI 5mm z-PFG cryogenic probe	Bruker		acquisition of NMR data
Name	Company	Catalog Number	Comments
Software			
Bruker TopSpin 4.0.1	Bruker		processing of NMR data
MO.Control	NanoTemper Technologies		included with Monlith NT.115
MO.Affinity Analysis	NanoTemper Technologies		included with Monlith NT.115