

Materials List for

Quantifying the Binding Interactions Between Cu(II) and Peptide Residues in the Presence and Absence of Chromophores

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Materials

Name	Company	Catalog Number	Comments
1,10-phenanthroline	Sigma Aldrich	131377-25G	
bis-Tris buffer	Fisher	BP301-100	
Bottle-top 0.45 micron membrane	Nalgene	296-4545	Any filtration system that removes the resin without introducing contaminants is acceptable
Copper(II) chloride	Alfa Aesar	12458	
EDTA	Sigma Aldrich	EDS-500G	
Electronic absorption spectrophotometer	Varian	Cary 5000	Another suitable sensitive spectrophotometer is acceptable
high affinity resin	Sigma Aldrich	C7901-25G	
Isothermal titration calorimeter (ITC)	TA Instruments	Nano ITC Low Volume	
ITC analysis software	TA Instruments	NanoAnalyze	SEDPHAT (<i>Methods</i> , 2015 , 76: 137–148) may also be used
ITC software	TA Instruments	ITCRun	
light-duty delicate wiper	Kimwipe	34155	
loading syringe	Hamilton	Syr 500 uL, 1750 TLL-SAL	
matched cuvettes	Starna Cells, Inc	16.100-Q-10/Z20	Ensure that the window for the small volume cuvette matches the beam height of the spectrophotometer
MOPS buffer	Alfa Aesar	A12914	
spectrophotometer software	Cary	WinUV Scan	
spreadsheet program	Microsoft	Excel	Any suitable spreadsheet program will work
titration syringe	TA Instruments	5346	
ultrapure water	Millipore Sigma	Milli-Q	Any water is okay as long as > 18 MΩ resistance