

Materials List for:

Study of Short Peptide Adsorption on Solution Dispersed Inorganic Nanoparticles Using Depletion Method

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Materials

Name	Company	Catalog Number	Comments
2-(<i>N</i> -Morpholino)ethanesulfonic acid	TCI Chemicals	4432-31-9	MES, >98%
Acetonitrile	Panreac AppliChem		HPLC grade
Chromatography vials			glass
Dipeptide Ile-His	Bachem	4000894	
Double-distilled water			DDW was obtained on spot
Heating cleaning bath "Ultrasons-HD"	J.P. Selecta	3000865	5 L, 40 kHz, 120 Watts
High-performance liquid chromatograph system equipped with a UV-vis detector	Shimadzu, LC-20 Prominence		HPLC
Isopropanol	Sigma-Aldrich (Merck)	67-63-0	99.70%
LabSolutions Lite	Shimadzu	223-60410	Software for high-performance liquid chromatography system
Nanocrystalline TiO ₂			Pure anatase with at least 99% crystallinity. Average particle size 10.62 ± 3.31 nm. Specific surface 131.9 m ² /g (BET). See <i>Langmuir</i> 2019, 35, 538–550, for details.
Phenyl isothiocyanate	Acros Organics	103-72-0	PITC, 98%
Reversed-phase Zorbax column	ZORBAX LC		150×2.5 mm i.d. with a mean particle size of 5 μm
Syringe filter	Vladfilter		25 mm, 0.2 μm pore, cellulose acetate
Test sterile polymeric tube			polypropylene
Thermostat TC-502	Brookfield		Refrigerating/heating circulating bath with the programmable controller for the sample derivatization
Triethylamine	Sigma-Aldrich (Merck)	121-44-8	TEA; 99%
Trifluoroacetic acid	Panreac AppliChem	163317	TFA, 99%