Materials List for:

Observation and Analysis of Blinking Surface-enhanced Raman Scattering

Yasutaka Kitahama[1]

[1]Department of Chemistry, Kwansei Gakuin University

Correspondence to: Yasutaka Kitahama at kitahama@kwansei.ac.jp

Materials

Name	Company	Catalog Number	Comments
Silver nitrate, 99.8%	Wako	194-00832	
Trisodium citrate dihydrate, 99. %	Wako	191-01785	
Poly-L-lysine aqueous solution, 0.1%	Sigma-Aldrich	P8920	
3,3'-disulfopropylthiacyanine triethylamine	Hayashibara Biochemical Laboratories	NK-2703	a kind of thiacyanine dyes
3,3'-diethyl-5,5'-dichloro-9-methylthiacarbocyanine iodine salt	Hayashibara Biochemical Laboratories	SMP-9	a kind of thiacarobocyanine dyes
Sodium chloride, 99.5%	Wako	191-01665	
Dimroth condenser	Iwaki	61-9722-22	perchased from AS ONE
Magnetic stirrer	Corning	DC-420D	
Oil bath	Advantech	OS-220	
Glass plate	Matsunami	S-1112	Microscope slide
Blower	Hozan	Z-288	Air duster
Liquid blocker pen	Daido Sangyo		LIQUID BLOCKER (Super Pap Pen). Ready-to-use hydrophobic barrier pen designed for immunohistochemistry applications
Inverted microscope	Olympus	IX-70	
Objective lens	Olympus	LCPlanFl 60×	NA 0.7
Dark field condenser	Olympus	U-DCD	NA 0.8–0.92
Cooled digital CCD camera	Hamamatsu	ORCA-AG	controlled by software Aqua Cosmos
Software for the cooled digital CCD camera	Hamamatsu	AquaCosmos	used for also derivation of the time-profiles from the blinking spots in the video
Color CCD camera	ELMO	TNC-C920	not used for analysis
DPSS laser	RGB laser system	NovaPro532-75	λ = 532 nm; 60 mW (corresponds to a power density of 600 W/cm2)
Interference filter	Semrock	LL01-532-12.5	
Long pass filter	Semrock	BLP01-532R-25	
Software for the distinguishment and counting of the bright/dark events	home-maid		programmed by C++
Software for the fitting by a power law	LightStone	Origin6.1	