

Materials List for:

An Optimized Protocol for the Efficient Radiolabeling of Gold Nanoparticles by Using a ¹²⁵I-labeled Azide Prosthetic Group

Jongho Jeon^{1,2}, Ha Eun Shim¹, Sajid Mushtaq^{1,2}, Mi Hee Choi¹, Sang Hyun Park^{1,2}, Dae Seong Choi¹, Beom-Su Jang^{1,2}

¹Advanced Radiation Technology Institute, Korea Atomic Energy Research Institute

²Department of Radiation Biotechnology and Applied Radioisotope Science, University of Science and Technology

Correspondence to: Jongho Jeon at jeonj@kaeri.re.kr, Beom-Su Jang at jangbs@kaeri.re.kr

URL: <https://www.jove.com/video/54759>

DOI: [doi:10.3791/54759](https://doi.org/10.3791/54759)

Materials

Name	Company	Catalog Number	Comments
Chloramine T trihydrate	Sigma	402869	
[¹²⁵ I]NaI in aq. NaOH	Perkin-Elmer	NEZ033A010MC	
Sodium metabisulfite	Sigma	S9000	
Formic acid	Sigma	251364	
Sep-Pak tC18 plus cartridge	Waters	WAT036800	
Dimethyl sulfoxide	Sigma	D2650	
Acetone	Sigma	650501	
Ethanol	Sigma	459844	
Gold(III) chloride trihydrate	Sigma	520918	
Tween 20	Sigma	P1379	
DBCO PEG SH (MW 5,000)	NANOCS	PG2-DBTH-5k	
TLC silica gel 60 F ₂₅₄	Merck		
Analytical HPLC	Agilent	1290 Infinity	Model number
Preparative HPLC	Agilent	1260 Infinity	Model number
Analytical C18 reverse-phase column	Agilent	Zorbax Eclipse XDB-C18	
Preparative C18 reverse-phase column	Agilent	PrepHT XDB-C18	
Radio TLC scanner	Bioscan	AR-2000	Model number
Radioisotope dose calibrator	Capintec, Inc	CRC -25R dose calibrator	Model number