

Materials List for:

# Sample Preparation and Imaging of Exosomes by Transmission Electron Microscopy

Min Kyo Jung<sup>1</sup>, Ji Young Mun<sup>2,3</sup>

<sup>1</sup>Department of Convergence Medicine, University of Ulsan College of Medicine and Asan Institute for Life Sciences, Asan Medical Center

<sup>2</sup>Department of Biomedical Laboratory Science, College of Health Science, Eulji University

<sup>3</sup>BK21 Plus Program, Department of Senior Healthcare, Graduate School, Eulji University

Correspondence to: Ji Young Mun at [mjy1026@gmail.com](mailto:mjy1026@gmail.com)

URL: <https://www.jove.com/video/56482>

DOI: [doi:10.3791/56482](https://doi.org/10.3791/56482)

## Materials

Name	Company	Catalog Number	Comments
Glutaraldehyde	EMS	16200	
Sodium cacodylate	EMS	12300	
Osmium tetroxide 1 g crystal	EMS	19100	Use only in fume hood
acetone	JUNSEI	1B2031	
Spurr medium	TED PELLA	18108	
Ultra-microtome	Leica	UCT	
Uranyl acetate	EMS	22400	Hazardous chemical
Lead citrate	EMS	17900	
Transmission Electron Microscopy	Hitachi	H7600	
nickel grid	EMS	G200-Ni	
Copper grid	EMS	G200-Cu	
glycine	SIGMA	022K5404	
Phosphate buffer saline	SIGMA	P4417	
Bovine serum albumin	Aurion	25557	
1st Antibody			purification in manually
Purified anti-human CD274 (B7-H1, PD-L1) Antibody	BioLegend	329710	Whole mount Immumogold
Purified Mouse IgG2b, κ Isotype Ctrl	BioLegend	401202	Whole mount Immumogold (Control)
2nd Anti-mouse igG conjugated 9-11 nm gold particle	sigma	G7652	
Transmission Electron Microscopy	JEOL	JEM2200FS	
Glow discharger	JEOL	JFC1100E	
Carbon grid	EMS	121119	
Paraformaldehyde	EMS	19210	
Formvar carbon coated Copper Grid (200 meh)	EMS	FCF200-CU	
Formvar carbon coated Nickel Grid (200 mesh)	EMS	FCF200-NI	