

Materials List for:

Fabrication of Mechanically Tunable and Bioactive Metal Scaffolds for Biomedical Applications

Hyun-Do Jung¹, Hyun Lee², Hyoun-Ee Kim^{2,3}, Young-Hag Koh⁴, Juha Song³

¹Liquid Processing & Casting Technology R&D Group, Korea Institute of Industrial Technology

²Department of Materials Science and Engineering, Seoul National University

³Advanced Institutes of Convergence Technology, Seoul National University

⁴School of Biomedical Engineering, Korea University

Correspondence to: Juha Song at sat105@snu.ac.kr

URL: <https://www.jove.com/video/53279>

DOI: [doi:10.3791/53279](https://doi.org/10.3791/53279)

Materials

| Name | Company | Catalog Number | Comments |
|---|----------------------|-----------------|--------------------------------------|
| Titanium powder | Alfa Aesar | #42624 | -325 mesh, 99.5% (metals basis) |
| Camphene | SigmaAldrich | #456055 | 95%, C ₁₀ H ₁₆ |
| KD-4 | Croda | | Hypermer, polymeric dispersant |
| Phosphate Buffer Solution (PBS) | Welgene | ML 008-01 | |
| Green Fluorescent Protein (GFP) | Genoss Co. | - | >98% purity, 1 mg/ml |
| Ball mill oven | SAMHENUG ENERGY | SH-BDO150 | |
| Freeze dryer | Ilshin Lab. | PVTFD50A | |
| Cold isostatic pressing (CIP) machine | SONGWON SYSTEMS | CIP 42260 | |
| Vaccum furnace | JEONG MIN INDUSTRIAL | JM-HP20 | |
| electical chaeye machine | FANUC robocut | 0iB | External use |
| Press machine | CG&S | AJP-200 | |
| Confocal laser scanning spectroscopy (CLSM) | Olympus | FluoView FV1000 | External use |