

## **Supporting Information**

### **Natural Antibiotic Oregano in Hydroxyapatite Coated Titanium Reduces Osteoclastic Bone Resorption for Orthopedic and Dental Applications**

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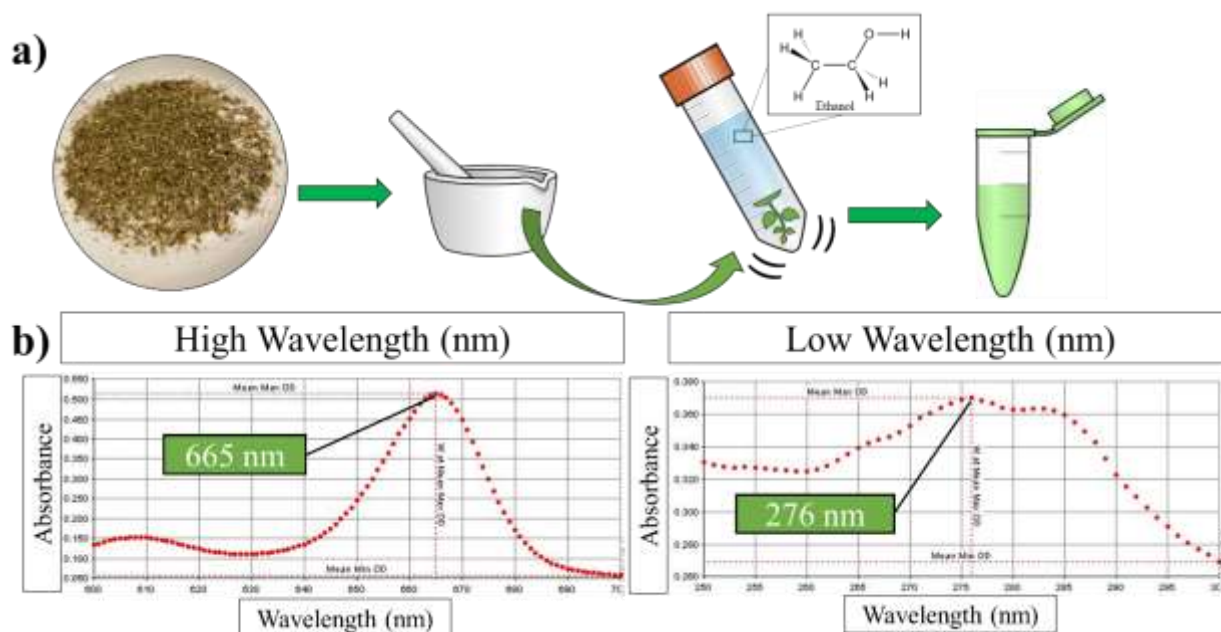
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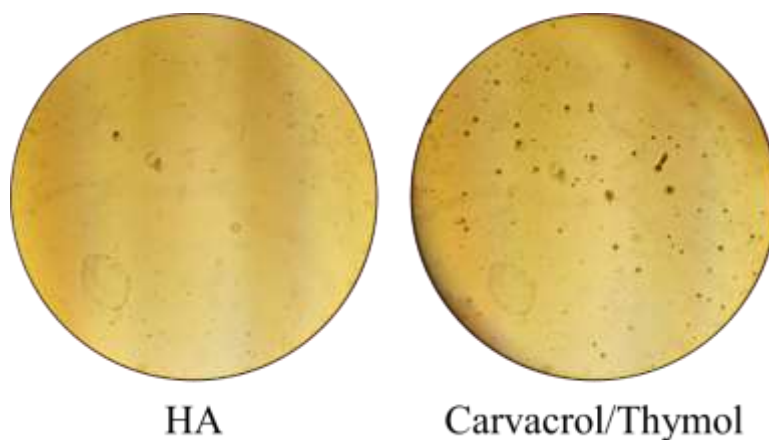
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**Figure S1.** Extraction of carvacrol and thymol from dried oregano leaves. **a)** Schematic of extraction process. **b)** UV-Vis analysis to identify absorbance peaks. A peak at 665 nm is indicative of carvacrol and the wavelength of 276 nm corroborates with carvacrol and thymol.



**Figure S2:** Optical microscopy images of the wells that held the osteoclast culture samples. Black speckles are dead cells that did not attach properly to the sample surface and fell into the well during the culture. Carvacrol/thymol has more dead which corroborates with the SEM micrographs.