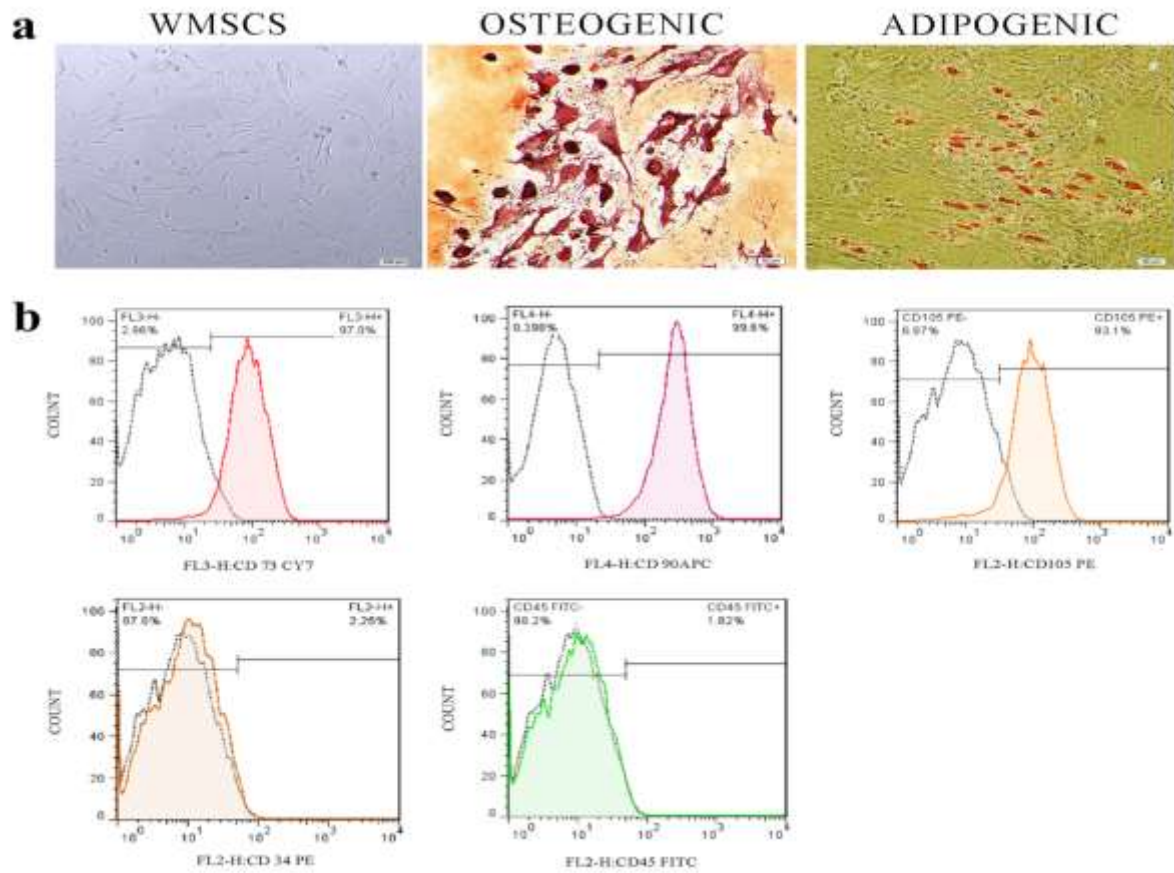
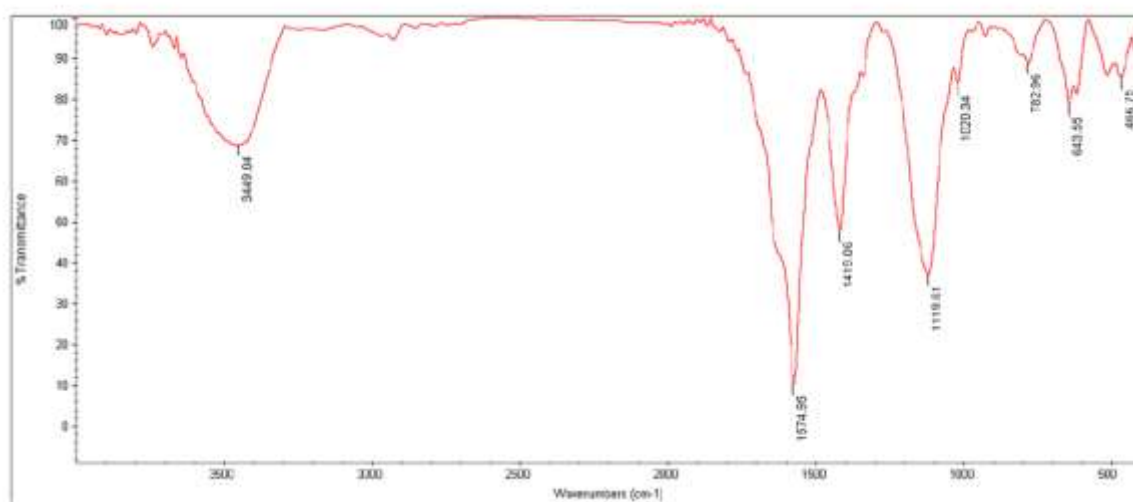




Supplementary 2. a) Microscopic Appearance of WJ-MSCs (passage 2) and Multilineage differentiation of WJ-MSCs. Adipogenesis was identified via oil-red-O staining. Osteogenesis was identified via Alizarin-red staining. b) For characterization of WJ-MSCs, surface marker profiling was determined by flow cytometry. CD73, CD90, and CD105 as positive markers. CD34 and CD45 as negative markers



Supplementary 3. The FT-IR spectrum of the EPS synthesized by the *Rhodotorula mucilaginosa* sp. GUMS16.