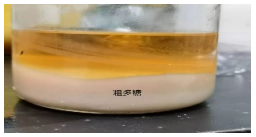
Cite this as: Feifei LI, Kehai LIU, Kewu LIU. Chemical characterization of a new sulfated polysaccharide from *Gracilaria chouae* and its activation effects on RAW264.7 macrophages[J]. Journal of Zhejiang University Science B, 2022, 23(1): 84-88. https://doi.org/10.1631/jzus.B2100508

Chemical characterization of a new sulfated polysaccharide from *Gracilaria chouae* and its activation effects on RAW264.7 macrophages

Key words: **Polysaccharide from *Gracilaria chouae* (GCP-3A), Chemical characterization, Activation effects on RAW264.7 macrophages**

Graphical abstract

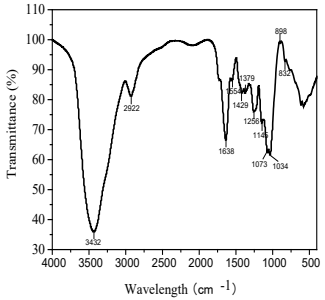
Extraction

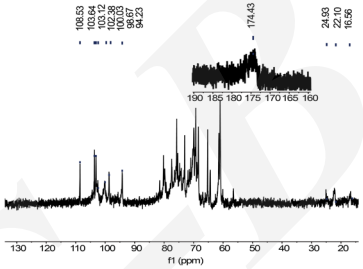


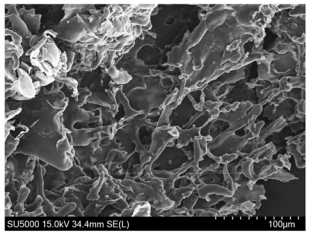
Purification

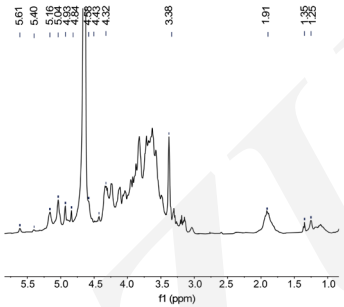
Two-step column chromatography

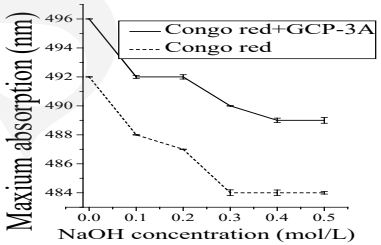
Chemical characterization and surface morphology of GCP-3A

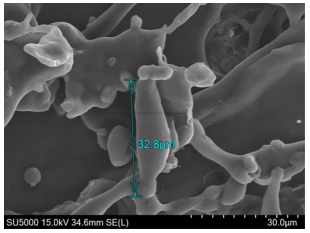




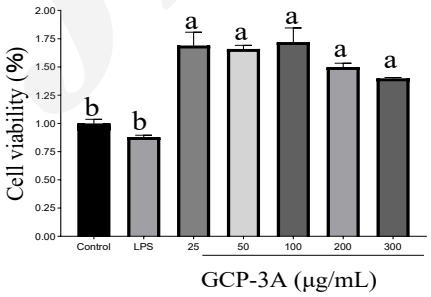


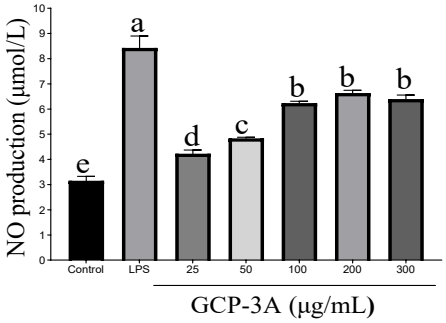






Effects of GCP-3A treatment onRAW264.7 macrophages





Highlights

- **A new sulfated polysaccharide GCP-3A from the red seaweed *Gracilaria chouae* was extracted and purified.**

- **Chemical characterization of GCP-3A was firstly studied.**

- **Activation effects of GCP-3A on RAW264.7 macrophages was firstly reported, raising the possibility of applications in functional food and medicine.**

Figure 4