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# **Cytocompatible - chitosan based multi-network hydrogels with antimicrobial, cell anti-adhesive and mechanical properties**

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## **Highlights**

- Highly strength hydrogels were prepared based on natural polysaccharide chitosan.
- Chitosan can endow multi-network hydrogels with good antimicrobial activity.
- Multi-network hydrogels exhibit good cytocompatible and cell anti-adhesive properties.
- The compressive and tensile strength of hydrogels could be facilely tailored.
- The antimicrobial, cytocompatible, cell anti-adhesive property can be facilely tailored

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