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(54) **CELLULOSE POROUS GEL MICROSPHERE
WITH UNIFORM PARTICLE SIZE,
PREPARATION METHOD AND
APPLICATION**

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(57) **ABSTRACT**

The present invention provides a cellulose porous gel microsphere with uniform particle size, a preparation method and application. Based on the liquid-liquid dispersion theory and the innovation of the underlying technology, the present invention proposes the preparation of high-performance cellulose porous gel microspheres by cellulose acetate solution with low viscosity. The present invention is environmental-friendly, low in requirements for equipment, low in cost, and easy for expanded production and application. The cellulose acetate with low viscosity is used as the raw material, and the prepared cellulose porous gel microspheres have high sphericity, uniform particle size, moderate microsphere pore size, high mechanical strength and excellent pressure/flow rate performance and are suitable for the modification of various ligands and the separation and the purification of various biomacromolecules in various modes after modification. The present invention can compete with agarose porous gel microspheres and can realize efficient separation of the biomacromolecules in chromatography.