

ABSTRACT

DEGRADABLE TEAR DUCT PLUG, PREPARATION METHOD THEREFOR AND APPLICATION THEREOF

Provided are a degradable tear duct plug, a preparation method therefor and an application thereof. A preparation method for a degradable tear duct plug comprises: first, putting a component A containing a polyethylene glycol derivative into a first material channel, and putting a component B containing a trilycine acetate into a second material channel; and then, extruding the component A and the component B respectively from the first material channel and the second material channel into the same mixing channel for static mixing to form a hydrogel, and heating and stretching the hydrogel after drying. The method adopts a continuous micro-mixing approach, simultaneous mixing and pouring can be achieved, and the pouring process is not affected by the gelation time, and therefore, the product does not generate bubbles and has uniform quality; moreover, due to the use of a hot stretching method for a dry gel, moisture absorption and secondary drying are not needed, and the process is simple. The degradable tear duct plug obtained by the method above contains no bubbles, has a smooth appearance and uniform quality, and is suitable for preparing drugs for treating dry eye, eye inflammation or glaucoma.