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(54) **BACILLUS, HYALURONIDASE, AND USES THEREOF**

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(58) **Field of Classification Search**

None

See application file for complete search history.

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(57) **ABSTRACT**

The present invention provides a *bacillus* sp. having a deposit access number of CGMCC NO. 5744 and a hyaluronidase produced by the *bacillus* and the amino acid sequence of the hyaluronidase is shown in SEQ ID NO: 2. The present invention further relates to a process for preparing oligomeric hyaluronic acid or salts thereof or low-molecular-weight hyaluronic acid or salts thereof by using the *bacillus* or the hyaluronidase produced thereby. The produced oligomeric hyaluronates or low-molecular-weight hyaluronates have advantages such as good transdermal absorption ability, high purity, no cytotoxicity, potent anti-oxidant ability. The present invention also provides use of the *bacillus* having a deposit access number of CGMCC NO. 5744, or the hyaluronidase, oligomeric hyaluronates or salts thereof, low-molecular-weight hyaluronates or salts thereof produced by the *bacillus* in the fields of cosmetics, food products and medicines.

23 Claims, 11 Drawing Sheets

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