# Fast and Accurate Gelatin Extraction Kit (GelExt KIT)

#### **TECHNOLOGY DESCRIPTION**

This technology is a kit used for extraction and identification of gelatin.

#### **TECHNOLOGY FEATURES**

This invention relates to a method of extracting gelatin protein from collagen containing raw materials and identifying the source of the extracted gelatin protein. This technology is able to provide optimized solutions that efficiently extract the gelatin protein from the processed products.

#### **ADVANTAGES**

- · highly efficient in extracting gelatin
- reliable
- fast
- accurate

### **INDUSTRY OVERVIEW**

## Prospect: Pharmaceutical Industry, Healthcare Industry and Food and Beverage Industry

The global gelatin market volume was estimated at 373.3 kilo tonnes in 2013 and growing at a Compound Annual Growth Rate (CAGR) 3.8% from 2014 to 2020. Demand for halal gelatin is estimated at 60 kilo tonnes per annum. Gelatin demand for nutraceutical applications is expected to reach 124.5 kilo tons by 2020, growing at a CAGR of 3.8% from 2014 to 2020. Less than 2% of global gelatin production is halal. Gelatin is a multifunctional ingredient which widely used in food and pharmaceutical industries. Since, the source of bovine or porcine gelatins becomes a controversial issue for certain consumers, it is crucial to provide a simple and rapid method to identify gelatin sources. One of the challenges of gelatin source identification is a gelatin protein extraction from processed products. The GelExt Kit addresses the challenge by providing optimized solutions that efficiently extract the gelatin protein from the processed products. The present invention generally relates to extraction and identification of gelatin. More particularly, the present invention relates to a method of extracting gelatin protein from collagen containing raw materials and identifying the source of the extracted gelatin protein. Key industry participants include Rousselot, Capsugel Inc., Catalent Pharma Solutions, Gelita AG, PB Gelatin and Sterling. The global gelatin market is concentrated in nature with the top four companies accounting for a lion's share of the overall market in 2015. The data from the Ministry of Health indicates that there are 132 Government Hospitals and 9 Special Medical Institutions with 1039, 1821, and 254 Health Clinics, Community Clinics, and 1 Malaysia Clinics, respectively in Malaysia with an additional 214 Private Facilities. In addition, there are 637 SMEs that operates in Healthcare industry and another 342 SMEs in Pharmaceutical industry. Another possible buyers include 3829 organizations in the Food and Beverage industry.



**Prof. Dr. Amin Ismail**Faculty of Medicine and Health Sciences