Abstract

The aim of the present study is to establish a rapid and high sensitive enzyme-linked immunoassay (ELISA) for detecting Naja naja atra (Taiwan cobra) and Bungarus multicinctus (Taiwan banded krait) venom. The results of the immunoassay carrying out using ELISA plates and dot blotting revealed that the antibodies obtained by immunizing with crude venom had a higher cross-reactivity than those by immunizing with purified venom proteins. It was found that anti-N. naja atra cardiotoxin antibodies and anti-N. naja atra phospholipase A2 antibodies showed a highest reactivity against N. naja atra venom. Alternatively, anti-Bungarus multicinctus b-bungarotoxin antibodies had a highest immuoreactivity toward Bungarus multicinctus venom. Comparing to ELISA plates, dot blotting had advantages on convenience and simplicity. Thus, dot blotting is suggested to be a better choice for preparing diagnostic kit for venoms assay.

Key Word：Enzyme-linked immunoassay、Immunoblotting、Taiwan cobra venom、Taiwan banded krait venom