

The binding of WSSV VP37 to shrimp hemocytes is mediated by its C terminal domain

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Abstract :

White spot syndrome virus (WSSV) is an envelope virus causing a high mortality of shrimp within 3-7 days. In this study, we characterized VP37 protein of WSSV and investigated its binding with shrimp hemocytes based on ELISA technique. The results showed that VP37 protein was able to bind with shrimp hemocytes in a dose-dependent manner. Truncation of VP37 revealed that while the VP37 fragments containing C-terminal domain region was bound strongly with shrimp hemocytes, the VP37 fragment with C-domain disrupted showed very weak hemocytes binding. For the first time, we proposed that the binding of VP37 to shrimp hemocytes was mediated by its C-terminal domain.

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