Validation of a KHV antibody enzyme-linked immunosorbent assay (ELISA) - DTU Orbit (25/09/2019)

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Koi herpesvirus (KHV) causes KHV disease (KHVD). The virus is highly contagious in carp or koi and can induce a high mortality. Latency and, in some cases, a lack of signs presents a challenge for virus detection. Appropriate immunological detection methods for anti-KHV antibodies have not yet been fully validated for KHV. Therefore, it was developed and validated an enzyme-linked immunosorbent assay (ELISA) to detect KHV antibodies. The assay was optimized with respect to plates, buffers, antigens and assay conditions. It demonstrated high diagnostic and analytical sensitivity and specificity and was particularly useful at the pond or farm levels. Considering the scale of the carp and koi industry worldwide, this assay represents an important practical tool for the indirect detection of KHV, also in the absence of clinical signs.

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