coronavirus results in an epidemic by jumping the

so-called species barrier (287).

The host spectrum of coronavirus increased when

a novel coronavirus, namely, SW1, was recognized

in the liver tissue of a captive beluga whale

(Delphinapterus leucas) (138). In recent decades,

several novel coronaviruses were identified from

different animal species. Bats can harbor these

viruses without manifesting any clinical disease but

are persistently infected (30). They are the only

mammals with the capacity for self-powered flight,

which enables them to migrate long distances, unlike

land mammals. Bats are distributed worldwide and

also account for about a fifth of all mammalian

species (6). This makes them the ideal reservoir host

for many viral agents and also the source of novel

coronaviruses that have yet to be identified. It has

become a necessity to study the diversity of

coronavirus in the bat population to prevent future

outbreaks that could jeopardize livestock and public

health. The repeated outbreaks caused by bat-origin

coronaviruses calls for the development of efficient

molecular surveillance strategies for studying

Betacoronavirus among animals (12), especially in

the Rhinolophus bat family (86). Chinese bats have

high commercial value, since they are used in