

A comment on “Serological survey of SARS-CoV-2 for experimental, domestic, companion and wild animals excludes intermediate hosts of 35 different species of animals”

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Abstract

In May 2020, Deng et al. (2020) published their article providing the evidence that no SARS-CoV-2-specific antibodies were detected in 1,914 samples which excluded the possibility of 35 animal species as intermediate host for SARS-CoV-2 in *Transboundary and Emerging Diseases*. In order to ensure the stability of SARS-CoV-2-specific antibodies in storage serum samples, we strongly suggest that standard serum banks should be established.

Letter to the Editors

Title: A comment on “Serological survey of SARS-CoV-2 for experimental, domestic, companion and wild animals excludes intermediate hosts of 35 different species of animals”

Running Head : Serum banks for serological survey of SARS-CoV-2

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Dear editor,

In May 2020, Deng et al. (2020) published their article providing the evidence that no SARS-CoV-2-specific antibodies were detected in 1,914 samples which excluded the possibility of 35 animal species as intermediate host for SARS-CoV-2 in *Transboundary and Emerging Diseases* . In order to ensure the stability of SARS-CoV-2-specific antibodies in storage serum samples, we strongly suggest that standard serum banks should be established.

The key of this study was the sera samples, which were collected from 35 different species of animals between November 2019 and March 2020. Notably, the background and storage conditions of the 1,914 serum samples

were not mentioned in the manuscript. To date, there is no evidence that SARS-CoV-2-specific antibody is stable during different storage temperature and time. The stability of the antibody titers to SARS-CoV-2 may influence the results and conclusion. The storage condition of the samples should be introduced during serological survey of SARS-CoV-2 in the future.

The establishment of serum banks should be considered the following two points. First, serum banks should be included standard preservation conditions and sample background. From sera samples collection to cold-chain transportation, it should be in accordance with the standard operating procedures. Additionally, the sera samples should be evaluated and formulated exclusion and inclusion criteria before including in the serum bank. Second, the samples should be collected from people, animals and bats from different regions and times. Besides the SARS-CoV-2, the samples from the serum bank should be used for serological studies of other emerging infectious diseases.

Thank you for your attention in considering this comment and we are looking forward to your response.

CONFLICT OF INTEREST

The authors declare no conflict of interest relevant to this article.

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REFERENCE

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