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Antibodies for Toxins: From Detection to Therapeutics

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Message from the Guest Editors

Antibodies are key determinants in the immune response. In addition to their role in the host's fight against infections and intoxications and thanks to their very high specificity and affinity for their targets, they are a privileged tool for the development of tests and detection methods, and for therapeutic applications. Thanks to their high selectivity, first applications had been in the design of highly sensitive immunoassays such as ELISA, plasmonic resonance assays, lateral-flow immunoassays, immuno-proteomics, and flow cytometry, among others. These methods allow toxin detection and measurements in environmental matrices as well as biological fluids with sensitivities down to the femtomolar range. In the therapeutic field, antibodies have been used as anti-toxins since the 19th century and are still the tools of choice in the fight against intoxication (bacterial toxins, plant toxins, etc.), for prophylactic and therapeutic purposes. Recombinant technologies may allow the new design of monoclonal antibodies to improve their efficacy and/or tolerance. We wish to cover articles on antibody-based methods for the detection and diagnosis of different toxins.









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Editor-in-Chief

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Message from the Editor-in-Chief

Toxinology is an incredibly diverse area of study, ranging from field surveys of environmental toxins to the study of toxin action at the molecular level. The editorial board and staff of *Toxins* are dedicated to providing a timely, peerreviewed outlet for exciting, innovative primary research articles and concise, informative reviews from investigators in the myriad of disciplines contributing to our knowledge on toxins. We are committed to meeting the needs of the toxin research community by offering useful and timely reviews of all manuscripts submitted. Please consider *Toxins* when submitting your work for publication.

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