



In Search of Selective High-Affinity Compounds to Inhibit Carbonic Anhydrases

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Message from the Guest Editor

Carbonic anhydrase (CA) is a fascinating enzyme that has been studied for over 80 years. Humans have 12 catalytically active, Zn-bearing isoforms of CA. Numerous drugs have been developed that target CAs, and the enzyme has worked as a model protein for a large number of biochemical and biophysical studies. Isoform CA IX is highly overexpressed in numerous cancers, making it a potential anticancer target for diagnostics and therapy. Despite ongoing clinical trials, however, no drug targeting CA IX has yet been approved as an anticancer agent.

I would like to invite you to submit papers to this Special Issue that address any research topic from organic synthesis and characterization of novel compounds that bind CAs to the structural studies that describe novel compound binding to CAs all the way to the biological mechanism CA IX and other isoforms play in cancer and other diseases. Any preclinical or clinical developments in the application of carbonic anhydrases as drug targets are welcome.





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