

## Synthesis of Monocyclic, Bicyclic, and Benzocyclobutene Amino Endoperoxides through Visible Light Catalysis

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**Abstract :** We describe the use of readily available self-doped TiO<sub>2</sub> and visible light, under a mild condition to synthesize a class of monocyclic, bicyclic, and benzocyclobutene amino compounds containing the endoperoxide bridges; their derivatives and further test their effective clinical activities against malaria, cancer, and their resistances. Considering their stable under photooxidation conditions and recyclability, we use a self-doped TiO<sub>2</sub> under a visible condition to synthesize these classes of amino endoperoxides. These amino endoperoxides are stable over a period compared to classes of endoperoxides.

**Keywords :** catalysis, endoperoxides, titanium dioxide, visible light

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