

# **Exploring the Potential of Xanthene Derivatives in Medicinal Chemistry: A Review**

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**Abstract:** Xanthenes are a special class of oxygen incorporating tricyclic compounds, structurally related to xanthones. The presence of different substituents on position 9 strongly influences on their physical and chemical properties as well as their various biological applications. Novel methodologies and number of catalysts have been reported for the synthesis of xanthene derivatives. They have also received significant interest from many pharmaceutical and synthetic chemist. Although Xanthenes are rare natural products and have been isolated from two different plant families, Compositae and Fabaceae<sup>[1-3]</sup>. The compounds based on these core templates exhibit a broad spectrum of biological pharmaceutical antimicrobial properties.

**Keywords:** Xanthenes.

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