

# Synthesis, Structure and Reactions of 1,3-Dimethyl-5-bis(thiomethyl)methylenebarbituric Acid

Kamal Sweidan<sup>a</sup>, Ahmed Abu-Rayyan<sup>b</sup>, Ahmad Al-Sheikh<sup>c</sup>, Cäcilia Maichle-Mößmer<sup>d</sup>,  
Manfred Steimann<sup>d</sup>, and Norbert Kuhn<sup>d</sup>

<sup>a</sup> Faculty of Pharmacy, Al-Zaytoonah University of Jordan, P. O. Box (130) 11733, Amman, Jordan

<sup>b</sup> Faculty of Pharmacy, Al Isra Private University, P. O. Box 22 and 23, Al Isra University Post Office,  
11622 Jordan

<sup>c</sup> Department of Pharmacy, The University of Petra, P. O. Box 961343, Amman, Jordan

<sup>d</sup> Institut für Anorganische Chemie der Universität Tübingen, Auf der Morgenstelle 18,  
D-72076 Tübingen, Germany

Reprint requests to Dr. K. Sweidan. E-mail: kamal\_sweidan@hotmail.com, or to  
Prof. Dr. N. Kuhn. E-mail: norbert.kuhn@uni-tuebingen.de

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1,3-Dimethyl-5-bis(thiomethyl)methylenebarbituric acid (**8**) is obtained from 1,3-dimethylbarbituric acid and CS<sub>2</sub>/NEt<sub>3</sub> followed by alkylation with methyl iodide. Compound **8** reacts with aqueous ammonia to give 5-amino(thiomethyl)methylene-1,3-dimethylbarbituric acid (**9**). With benzylamine, the thiomethyl substituent in **9** is replaced to give 5-amino(benzylamino)methylene-1,3-dimethylbarbituric acid (**10**) while with methanesulfonic acid the sulfonate salt **11** is formed. The crystal structures of **8** and **9** are reported.

*Key words:* Heterocycles, Barbituric Acid, Alkene, Crystal Structure