

Modified methods to simplification histochemical, immunohistochemical, and hematoxylin-eosin staining

Ali Kalantari-Hesari^{1*}, Hassan Morovvati², Mohammad Babaei³, Alireza Nourian⁴,
Kaveh Esfandiari⁵, Taher Elmi⁶ and Salman Soltani⁷

¹ Assistant Professor, Department of Pathobiology, Faculty of Veterinary Science, Bu-Ali Sina University, Hamedan, Iran

² Professor, Department of Basic Science, Faculty of Veterinary Medicine, University of Tehran, Tehran, Iran

³ Assistant Professor, Department of Clinical Sciences, Faculty of Veterinary Science, Bu-Ali Sina University, Hamedan, Iran

⁴ Associate Professor, Department of Pathobiology, Faculty of Veterinary Science, Bu-Ali Sina University, Hamedan, Iran

⁵ Assistant Professor, Department of Basic Science, Faculty of Veterinary Medicine, Science and Research Branch, Islamic Azad University, Tehran, Iran.

⁶ Assistant Professor, Department of Laboratory Science, Babol Branch, Islamic Azad University, Babol, Iran

⁷ PhD of comparative histology, Central Laboratory, University of Ilam, Ilam, Iran

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Abstract

Most histotechnical methods and preparation of tissue sections were invented and used in the 18th and 19th centuries. Due to the colorless nature of most cells and tissues in the body, tissue staining methods were used from the beginning to differentiate cells and tissues. *Materials & Methods:* According to sources and reports in this field, the time required for each hematoxylin-eosin staining period is approximately 80 minutes. In the present study, a method of hematoxylin-eosin staining is reported that reduces the time required for staining by maintaining the quality of sections and staining from 80 minutes to less than 40 minutes. Also, considering the existing problems regarding the cost of histochemistry and immunohistochemistry kits, the Low amount of kits and the problems that exist in the drip staining method of this type of staining, the present report tries to present three creative methods in this regard. These methods increase the quality of the prepared slides, in addition to reducing consumables. Optimization of tissue staining steps can reduce expenses spent and increase the quality of tissue sections.

Keywords: Tissue sections, Histotechnique, Histochemistry, Immunohistochemistry

* **Corresponding Author:** Ali Kalantari-Hesari, Assistant Professor, Department of Pathobiology, Faculty of Veterinary Science, Bu-Ali Sina University, Hamedan, Iran
E-mail: a.kalantarihesari@basu.ac.ir



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