









- S, Paroni R, Verzeletti A, et al. Application of alternative fixatives to formalin in diagnostic pathology. *Eur J Histochem* 2012; 56:e12.
9. Gillespie JW, Best CJ, Bichsel VE, Cole KA, Greenhut SF, Hewitt SM, et al. Evaluation of non-formalin tissue fixation for molecular profiling studies. *Amer J Pathol* 2002; 160:449-57.
  10. Klopffleisch R, von Deetzen M, Weiss AT, Weigner J, Weigner F, Plendl J, Gruber AD. Weigners fixative – an alternative to formalin fixation for histology with improved preservation of nucleic acids. *Vet Pathol* 2013;50:191-9.
  11. Mueller C, Edmiston KH, Carpenter C, Gaffney E, Ryan C, Ward R, et al. One-step preservation of phosphoproteins and tissue morphology at room temperature for diagnostic and research specimens. *PLoS One* 2011;6:e23780.
  12. Nietner T, Jarutat T, Mertens A. Systematic comparison of tissue fixation with alternative fixatives to conventional tissue fixation with buffered formalin in a xenograft-based model. *Virchows Arch* 2012;461:259-69.
  13. Olert J, Wiedorn KH, Goldman T, Kühl H, Mehraein Y, Scherthan H, et al. HOPE fixation: a novel fixing method and paraffin-embedding technique for human soft tissues. *Pathol Res Practice* 2001;197:823-6.
  14. Rieger J, Twardziok S, Huenigen H, Hirschberg RM, Plendl J. Porcine intestinal mast cells. Evaluation of different fixatives for histochemical staining techniques considering tissue shrinkage. *Eur J Histochem* 2013;57:e21.
  15. Vincek V, Nassiri M, Nadji M, Morales AR. A tissue fixative that protects macromolecules (DNA, RNA, and protein) and histomorphology in clinical samples. *Lab Invest* 2003;83:1427-35.
  16. Beckstead JH. A simple technique for preservation of fixation-sensitive antigens in paraffin-embedded tissues. *J Histochem Cytochem* 1994;42:1127-34.
  17. Eltoun IE, Fredenburgh J, Grizzle W. Advanced concepts in fixation: 1. Effects of fixation on immunohistochemistry, reversibility of fixation and recovery of proteins, nucleic acids, and other molecules from fixed and processed tissues. 2. Developmental methods of fixation. *J Histotechnol* 2001;2:201-10.
  18. Hicks DJ, Johnson L, Mitchell SM, Gough J, Cooley WA, La Ragione RM, et al. Evaluation of zinc salt based fixatives for preserving antigenic determinants for immunohistochemical demonstration of murine immune system cell markers. *Biotech Histochem* 2006;81:23-30.
  19. Lynn JA, Whitaker BP, Hladik CL, Robinson RJ, Joie JB, Stigliano WW, et al. Zinc isopropyl alcoholic unbuffered formalin as a postfixative for routine surgical pathology specimens. *J Histotechnol* 1994;17:105-9.
  20. Ott SR. Confocal microscopy in large insect brains: zinc-formaldehyde fixation improves synapsin immunostaining and preservation of morphology in whole-mounts. *J Neurosci Methods* 2008; 172:220-30.
  21. Tome Y, Hirohashi S, Noguchi M, Shimosato Y. Preservation of cluster 1 small cell lung cancer antigen in zinc-formalin fixative and its application to immunohistological diagnosis. *Histopathology* 1990;16:469-74.
  22. Wester K, Asplund A, Bäckvall Holmberg P, Derveniece A, Hartmane I, et al. Zinc-based fixative improves preservation of genomic DNA and proteins in histoprocessing of human tissues. *Lab Invest* 2003;83:889-99.
  23. Ambrosi G, Fleser P, Lorusso L, Girolamo F, Rizzi A, Boccia L, et al. Non-traditional large neurons in the granular layer of the cerebellar cortex. *Eur J Histochem* 2007;51 (Suppl.1):59-64.
  24. Chaumasov EI, Korzhevskii DE, Petrova ES, Sapronov NS, Kuznetsova NN. Glial reaction of the subventricular zone of the telencephalon of the rat brain on modeling of Alzheimer's disease. *Neurosci Behav Physiol* 2012;42:67-71.
  25. Grigoriev IP, Vasilenko MS, Sukhorukova EG, Korzhevskii DE. Use of different antibodies to tyrosine hydroxylase to study catecholaminergic systems in the mammalian brain. *Neurosci Behav Physiol* 2012;42:210-3.
  26. Kirik OV, Alekseeva OS, Moskvina AN, Korzhevskii DE. Effects of hyperbaric oxygenation on subependymal microglia of the rat brain. *J Evol Biochem Physiol* 2014;50:353-6.
  27. Korzhevskii DE, Gilyarov AV, Kirik OV, Lentsman MV, Vlasov TD. Induction of nestin synthesis in rat brain cells by ischemic damage. *Neurosci Behav Physiol* 2008;38:139-43.
  28. Korzhevskii DE, Gilyarov AV, Otellin VA, Lentsman MV, Kostkin VB. Morphological manifestations of local functional activation of astrocytes induced by transient global cerebral ischemia. *J Evol Biochem Physiol* 2007;43:505-8.
  29. Korzhevskii DE, Kirik OV, Baisa AE, Vlasov TD. Simulation of unilateral ischemic injury to the striatal neurons inflicted by short-term occlusion of the middle cerebral artery. *Bull Exp Biol Med* 2009;147: 255-6.
  30. Korzhevskii DE, Kirik OV, Lentsman MV, Otellin VA. Morphological types of activated microglial cells in the hippocampus present after transient total cerebral ischemia. *Neurosci Behav Physiol* 2013; 43:861-4.
  31. Korzhevskii DE, Kirik O, Sukhorukova E. Immunocytochemistry of microglial cells, pp. 209-24. In: A. Merighi A, L. Lossi L, eds., *Immunocytochemistry and related techniques*. New York: Springer; 2015.
  32. Suchorukova EG, Kirik OV, Korzhevskii DE. The use of immunohistochemical method for detection of brain microglia in paraffin sections. *Bull Exp Biol Med* 2010;149:768-70.
  33. Korzhevskii DE, Sukhorukova EG, Gilerovich EG, Petrova ES, Kirik OV, Grigor'ev IP. Advantages and disadvantages of zinc-ethanol-formaldehyde as a fixative for immunocytochemical studies and confocal laser microscopy. *Neurosci Behav Physiol* 2014;44:542-5.
  34. Kirik OV, Sukhorukova EG, Korzhevskii DE. Calcium-binding protein Iba-1/AIF-1 in rat brain cells. *Neurosci Behav Physiol* 2011;41:149-52.
  35. Korzhevskii DE, Sukhorukova EG, Kirik OV, Alekseeva OS. Astrocytes of the subventricular zone of the telencephalon. *Neurosci Behav Physiol* 2012;42:789-91.