

Folia Histochemica et Cytobiologica

Scientific quarterly devoted to problems of histochemistry,
cytochemistry and cell & tissue biology

Vol. 58

No. 1–4

2020

www.fhc.viamedica.pl

Official Journal of the Polish Society for Histochemistry and Cytochemistry

CONTENTS

No. 1

ORIGINAL PAPERS

**Foxo3a aggravates inflammation and induces apoptosis in IL-1-treated rabbit chondrocytes
via positively regulating tenascin-c**

Fei Wang, Qiubin Wang, Ming Zhu, Qi Sun..... 1

**MiR-491-3p is down-regulated in postmenopausal osteoporosis and affects growth, differentiation
and apoptosis of hFOB1.19 cells through targeting CTSS**

Wen-Xiong Hu, Hua Li, Jia-Zheng Jiang..... 9

**Expression of CD163 and HLA-DR molecules on the monocytes in chronic
lymphocytic leukemia patients**

Wioleta Kowalska..... 17

**Monocytic MDSC as a source of immunosuppressive cytokines in chronic lymphocytic
leukemia (CLL) microenvironment**

Wioleta Kowalska, Agnieszka Bojarska-Junak 25

**Search of reference biomarkers reflecting orbital tissue remodeling
in the course of Graves' orbitopathy**

Przemyslaw Pawlowski, Izabela Poplawska, Janusz Mysliwiec, Willem A. Dik, Anja Eckstein,
Utta Berchner-Pfannschmidt, Robert Milewski, Slawomir Lawicki,
Zofia Dzieciol-Anikiej, Robert Rejdak, Joanna Reszec 37

**Study of DNA topoisomerase II α expression in canine lymphomas and its potential role
as a marker of sensitivity to anthracycline-based chemotherapy in dogs**

Pawel Klimiuk, Wojciech Lopuszynski, Kamila Bulak, Anna Smiech, Adam Brzana..... 46

Cholinergic and adrenergic innervation of the pancreas in chinchilla (*Chinchilla Laniger Molina*)

Malgorzata Radzimirska, Jacek Kuchinka, Elzbieta Nowak, Wojciech Trybus, Aleksander Szczurkowski 54

No. 2

ORIGINAL PAPERS

- Immunocytochemical localization of tyrosine hydroxylase in the visual cortex of the microbat, *Rhinolophus ferrumequinum***
Myung-Jun Lee, Kyung-Min Kwon, Won-Tae Lee, Gil-Hyun Kim, Chang-Jin Jeon 61
- Features of gonadal dysgenesis and Leydig cell impairment in testes with Sertoli cell-only syndrome**
Daria Adamczewska, Jolanta Slowikowska-Hilczer, Katarzyna Marchlewska, Renata Walczak-Jedrzejowska 73
- Expression of angiogenic factor with G patch and FHA domains 1 (AGGF1) in placenta from patients with preeclampsia**
Lan-fen An, Shu-qi Chi, Jun Zhang, Hong-bo Wang, Wei-xiang Ouyang 83
- Immunohistochemical detection of prolactin in clinically non-functioning pituitary adenomas**
Katarzyna Winczyk, Joanna Toszek, Jacek Swietoslowski, Ewa Wojtczak, Marek Pawlikowski 90
- Overexpression of Rictor protein and Rictor-*H. pylori* interaction has impact on tumor progression and prognosis in patients with gastric cancer**
Fang Wang, Xiaoqi Lou, Yanfeng Zou, Dingtao Hu, Jiatao Liu, Jie Ning, Yang Jiao, Zuoyang Zhang, Feng Yang, Lulu Fan, Hanqing Yu, Wei Wei, Hua Wang, Guoping Sun 96
- Downregulation of Polo-like kinase-1 (PLK-1) expression is associated with poor clinical outcome in uveal melanoma patients**
Tomasz Berus, Anna Markiewicz, Katarzyna Kobylinska, Przemyslaw Biecek, Jolanta Orłowska-Heitzman, Bożena Romanowska-Dixon, Piotr Donizy 108
- Gamma linolenic acid suppresses hypoxia-induced gastric cancer cell growth and epithelial-mesenchymal transition by inhibiting the Wnt/ β -catenin signaling pathway**
Yan Wang, Jian Shi, Liya Gong 117
- Bisdemethoxycurcumin exerts a cell-protective effect via JAK2/STAT3 signaling in a rotenone-induced Parkinson's disease model *in vitro***
Duanqun He, Shuangxi Chen, Zijian Xiao, Heng Wu, Guijuan Zhou, Chenlin Xu, Yunqian Chang, Yihui Li, Gang Wang, Ming Xie 127
- A close neuroanatomical relationship between the enkephalinergic (methionine-enkephalin) and tachykininergic (substance P) systems in the alpaca diencephalon**
Pablo Sánchez, Manuel Lisardo Sánchez, Arturo Mangas, Luís Ángel Aguilar, Rafael Coveñas 135
- Reactivity of astrocytes in the periaqueductal gray matter of rats treated with monosodium glutamate**
Aleksandra Krawczyk, Jadwiga Jaworska-Adamu 147
- The effect of dental gel formulation on human primary fibroblasts — an *in vitro* study**
Barbara Sterczala, Julita Kulbacka, Jolanta Saczko, Marzena Dominiak 156

No. 3

REVIEW

- An overview of applications of CRISPR-Cas technologies in biomedical engineering**
Saleh Jamehdor, Kasra Arbabi Zaboli, Sina Naserian, Jose Thekkiniath, Honey Alef Omidy, Ali Teimoori, Behrooz Johari, Amir Hossein Taromchi, Yu Sasano, Saeed Kaboli 163

ORIGINAL PAPERS

- A knockdown of the herpes simplex virus type-1 gene in all-in-one CRISPR vectors**
Nastaran Khodadad, Mona Fani, Saleh Jamehdo, Rahil Nahidsamiei, Manoochehr Makvandi, Saeed Kaboli, Ali Teimoori, Jose Thekkiniath 174

The Light/Dark cycle disruption affects hepatic function both in metabolic parameters and tissue structure in a nocturnal desert rodent: <i>Gerbillus tarabuli</i>	
Amina Derbouz Rouibate, Nadir Benhafri, Saliha Ouali-Hassenaoui, Aicha Dekar-Madoui	182
Wilms' tumor 1 antigen immunoreactivity in epithelial ovarian cancer — diagnostic and prognostic value	
Elzbieta Zarychta, Katarzyna Lepinay, Sebastian Szubert, Jakub Jozwicki, Jan Misiak, Anna A. Brozyna, Katarzyna Kosinska-Kaczynska, Agnieszka Lewandowska, Ewa Malicka, Adrianna Makarewicz, Piotr Rhone, Wojciech Jozwicki	198
Suppression of the inflammation and fibrosis in Asherman syndrome rat model by mesenchymal stem cells: histological and immunohistochemical studies	
Nagla Mohamed Salama, Somaia Saad Zaghlool, Hala Hassan Mohamed, Samaa Samir Kamar.....	208
Upregulated miR-96-5p inhibits cell proliferation by targeting HBEGF in T-cell acute lymphoblastic leukemia cell line	
Kaihong Xu, Xiao Yan, Guifang Ouyang, Jinyi Feng, Lilin Ye, Xuezhen Hu, Dingsheng Liu	219
RhTSG-6 inhibits IL-1β-induced extracellular matrix degradation and apoptosis by suppressing the p38, and JNK pathways in nucleus pulposus cells	
Shishen Pei, Jinwei Ying, Yan Zhang, Linhao Su, Shi Cheng, Dike Ruan	227

No. 4

ORIGINAL PAPERS

Ghrelin gastric tissue expression in patients with morbid obesity and type 2 diabetes submitted to laparoscopic sleeve gastrectomy: immunohistochemical and biochemical study	
Khlood Mohammed Mehdar, Saeed Ali M Alsareii, Sabah Elshafie Mohammed Alshafie, Aziza Rashed Al-Rafiah, Abdurahman M. Alamri	235
IGFBP7 aggravates sepsis-induced acute lung injury by activating the ERK1/2 pathway	
Qiaolian Xu, Jun Wang	247
ZNF750 inhibits the proliferation and invasion of melanoma cells through modulating the Wnt/β-catenin signaling pathway	
Yong Du, Guozhong LV, Changrui Jing, Junjie Liu, Jing Liu	255
The protective impact of Trans-Cinnamaldehyde (TCA) against the IL-1β induced inflammation in <i>in vitro</i> osteoarthritis model by regulating PI3K/AKT pathways	
Jian-rong Wu, Wen-jie Zhong, Zhen-dong Chen, Ben-qi Zhu, Yun-yun Jiang, Piotr M. Wierzbicki.....	264

SHORT COMMUNICATION

Urothelial cancer of the prostate gland. Immunohistochemical analysis of two cases of rare canine cancer	
Rafal Ciaputa, Valeria Grieco, Izabela Janus, Malgorzata Kandefier-Gola, Piotr Dziegiel, Marcin Nowak.....	272