

Publication list – Alexandru Babes

1. Kistner, K.*, Siklosi, N.*, **Babes, A.***, Khalil, M., Selescu, T., Zimmermann, K., Wirtz, S., Becker, C., Neurath, M.F., Reeh, P.W., Engel, M.A. (2016) “Systemic desensitization through TRPA1 channels by capsaizepine and mustard oil - a novel strategy against inflammation and pain”, *Scientific Reports*, **6**:28621. IF = 5.58 (* equal contribution)
2. **Babes, A.**, Sauer, S.K., Moparthi, L., Kichko, T.I., Neacsu, C., Namer, B., Filipovic, M., Zygmunt, P.M., Reeh, P.W., Fischer, M.J. (2016), “Photosensitization in Porphyrrias and Photodynamic Therapy Involves TRPA1 and TRPV1”, *Journal of Neuroscience*, **36(19)**:5264-78. IF = 6.34
3. Khalil, M., **Babes, A.**, Lakra, R., Förch, S., Reeh, P.W., Wirtz, S., Becker, C., Neurath, M.F., Engel, M.A. (2016), “Transient receptor potential melastatin 8 ion channel in macrophages modulates colitis through a balance-shift in TNF-alpha and interleukin-10 production”, *Mucosal Immunology*, **9(6)**:1500-1513. IF = 7.37
4. Ciobanu, A.C., Selescu, T., Gasler, I., Soltuzu, L., **Babes, A.** (2016), “Glycolytic metabolite methylglyoxal inhibits cold and menthol activation of the transient receptor potential melastatin type 8 channel”, *Journal of Neuroscience Research*, **94(3)**:282-94. IF = 2.59
5. Eberhardt, M., Dux, M., Namer, B., Miljkovic, J., Cordasic, N., Will, C., Kichko, T.I., de la Roche, J., Fischer, M., Suárez, S.A., Bikiel, D., Dorsch, K., Leffler, A., **Babes, A.**, Lampert, A., Lennerz, J.K., Jacobi, J., Martí, M.A., Doctorovich, F., Högestätt, E.D., Zygmunt, P.M., Ivanovic-Burmazovic, I., Messlinger, K., Reeh, P., Filipovic, M.R. (2014), “H₂S and NO cooperatively regulate vascular tone by activating a neuroendocrine HNO-TRPA1-CGRP signalling pathway”, *Nature Communications*, **5**: 4381. **FI**: 11.47
6. Cucu, D., Chiritoiu, G., Petrescu, S., **Babes, A.**, Stanica, L., Duda, D. G., Horii, A., Dima, S. O., Popescu, I. (2014), “Characterization of Functional Transient Receptor Potential Melastatin 8 Channels in Human Pancreatic Ductal Adenocarcinoma Cells”, *Pancreas*, **43(5)**: 795-800. **FI**: 2.96
7. Selescu, T., Ciobanu, A. C., Dobre, C., Reid, G., **Babes, A.** (2013), “Camphor activates and sensitizes transient receptor potential melastatin 8 (TRPM8) to cooling and icilin”, *Chemical Senses*, **38(7)**: 563-575. **FI**: 3.16
8. **Babes, A.**, Fischer, M. J., Filipovic, M., Engel, M. A., Flonta, M. L., Reeh, P. W. (2013), “The anti-diabetic drug glibenclamide is an agonist of the transient receptor potential Ankyrin 1 (TRPA1) ion channel”, *European Journal of Pharmacology*, **704(1-3)**: 15-22. **FI**: 2.53
9. Bierhaus, A., Fleming, T., Stoyanov, S., Leffler, A., **Babes, A.**, Neacsu, C., Sauer, S. K., Eberhardt, M., Schnölzer, M., Lasischka, F., Neuhuber, W. L., Kichko, T. I., Konrade, I., Elvert, R., Mier, W., Pirags, V., Lukic, I. K., Morcos, M., Dehmer, T., Rabbani, N., Thornalley, P.J., Edelstein, D., Nau, C.,

- Forbes, J., Humpert, P. M., Schwaninger, M., Ziegler, D., Stern, D. M., Cooper, M. E., Haberkorn, U., Brownlee, M., Reeh, P. W., Nawroth, P. P. (2012), "Methylglyoxal modification of Nav1.8 facilitates nociceptive neuron firing and causes hyperalgesia in diabetic neuropathy", *Nature Medicine*, **18(6)**: 926-933. **FI**: 27.36
10. Engel, M. A., Leffler, A., Niedermirtl, F., **Babes, A.**, Zimmermann, K., Filipović, M. R., Izydorczyk, I., Eberhardt, M., Kichko, T. I., Mueller-Tribbensee, S. M., Khalil, M., Siklosi, N., Nau, C., Ivanović-Burmazović, I., Neuhuber, W. L., Becker, C., Neurath, M. F., Reeh, P. W. (2011), "TRPA1 and substance P mediate colitis in mice", *Gastroenterology*, **141(4)**: 1346-1358. **FI**: 16.71
11. **Babes, A.**, Ciobanu, A. C., Neacsu, C., Babes, R. M. (2011), "TRPM8, a Sensor for Mild Cooling in Mammalian Sensory Nerve Endings", *Current Pharmaceutical Biotechnology*, **12(1)**: 78-88. **FI**: 2.51
12. Neacsu, C., **Babes, A.** (2010), "The M-channel blocker linopirdine is an agonist of the capsaicin receptor TRPV1", *Journal of Pharmacological Sciences*, **114(3)**: 332-340. **FI**: 2.36
13. **Babes, A.**, Fischer, M.J., Reid, G., Sauer, K., Zimmermann, K., Reeh, P.W. (2010), "Electrophysiological and neurochemical techniques to investigate sensory neurons in analgesia research", *Methods in Molecular Biology*, **617**:237-259.
14. Neacsu, C., Ciobanu, C., Barbu, I., Toader, O., Szegli, G., Kerek, F., **Babes, A.** (2010), "Substance MCS-18 isolated from *Helleborus purpurascens* is a potent antagonist of the capsaicin receptor, TRPV1, in rat cultured sensory neurons", *Physiological Research*, **59**:289-298. **FI**: 1.29
15. Ciobanu, C., Reid, G., **Babes, A.** (2009), "Acute and chronic effects of neurotrophic factors BDNF and GDNF on responses mediated by thermo-sensitive TRP channels in cultured rat dorsal root ganglion neurons", *Brain Research*, **1284**:54-67. **FI**: 2.84
16. Zimmermann, K., Leffler, A., **Babes, A.**, Cendan, C. M., Carr, R. W., Kobayashi, J., Nau, C., Wood, J. N., Reeh, P. (2007), "Sensory neuron sodium channel Nav1.8 is essential for pain at low temperatures", *Nature*, **447**:855-859. **FI**: 41.46
17. Leffler, A., Linte, R., Nau, C., Reeh, P., **Babes, A.** (2007), "A high-threshold heat-activated channel in cultured rat dorsal root ganglion neurons resembles TRPV2 and is blocked by gadolinium", *European Journal of Neuroscience*, **26**:12-22. **FI**: 3.81
18. Linte, R.M., Ciobanu, C., Reid, G., **Babes, A.** (2007), "Desensitization of cold- and menthol-sensitive rat dorsal root ganglion neurones by inflammatory mediators", *Experimental Brain Research*, **178(1)**: 89-98. **FI**: 2.04

19. **Babes, A.**, Zorzon, D., Reid, G. (2006), "A novel type of cold-sensitive neurone in rat dorsal root ganglia with rapid adaptation to cooling stimuli", *European Journal of Neuroscience*, **24(3)**: 691-698. **FI**: 3.81
20. **Babes, A.**, Zorzon, D., Reid, G. (2004), "Two populations of cold sensitive neurones in rat dorsal root ganglia and their modulation by nerve growth factor", *European Journal of Neuroscience*, **20**: 2276-2282. **FI**: 3.81
21. Reid, G., **Babes, A.**, Pluteanu, F. (2002), "A cold- and menthol-activated current in rat dorsal root ganglion neurones: properties and role in cold transduction", *Journal of Physiology*, **545 (2)**: 595-614. **FI**: 5.04
22. Marden, M. C., Cabanes, M., **Babes, A.**, Kiger, L., Griffon, N., Poyart, C., Boyiri, T., Safo, M. K., Abraham, D. J. (2002) "Control of the allosteric equilibrium of hemoglobin by crosslinking agents", *Protein Science*, **11**: 1376-1383. **FI**: 2.85
23. **Babes, A.**, Amuzescu, B., Krause, U., Scholz, A., Flonta, M.-L., Reid, G., (2002), "Cooling inhibits capsaicin-induced currents in cultured rat dorsal root ganglion neurones", *Neuroscience Letters*, **317(3)**: 131-134. **FI**: 2.03
24. **Babes, A.**, Lorinczi, E., Ristoiu, V., Flonta, M.-L., Reid G., (2001), "Slowing of inactivation at positive potentials in a rat axonal K^+ channel is not due to preferential closed-state inactivation", *Physiological Research*, **50**: 557-565. **FI**: 1.29
25. **Babes, A.**, Fendler K., (2000), " Na^+ transport and the E_1P - E_2P conformational transition of the Na^+/K^+ -ATPase", *Biophysical Journal*, **79**: 2557-2571. **FI**: 3.97
26. Ganea, C., **Babes, A.**, Lupfert, C., Grell, E., Fendler, K., Clarke, R. J., (1999), "Hofmeister effects of anions on the kinetics of partial reactions of the Na^+,K^+ -ATPase", *Biophysical Journal*, **77**: 267-281. **FI**: 3.97