Curriculum Vitae (September 1st, 2017)

Kazuho Sakamoto, Ph.D.

Assistant Professor
Department of Bio-Informational Pharmacology, School of Pharmaceutical Sciences, University of Shizuoka
52-1 Yada, Suruga-ku, Shizuoka 420-0885, Japan
Tel&Fax: +81-, E-mail: kazuho@u-shizuoka-ken.ac.jp

Education

1997-2001
Bachelor program in Faculty of Pharmaceutical Sciences, Nagoya City University, Nagoya, Japan (Prof. Yuji Imaizumi).

2001-2003
Master program in Department of Molecular and Cellular Pharmacology, Graduate school of Pharmaceutical Sciences, Nagoya City University, Nagoya, Japan (Prof. Yuji Imaizumi).
Thesis Title: “Effect of resin acids on potassium channels.”

2003-2006
Ph.D. program in Department of Molecular and Cellular Pharmacology, Graduate school of Pharmaceutical Sciences, Nagoya City University, Nagoya, Japan (Prof. Yuji Imaizumi).
Thesis Title: “Discovery of novel synthesized potassium channels openers derived from resin acids.”

Professional Experience

2006-2010
Research Assistant Professor in Department of Pharmacology, School of Medicine, Fukushima Medical University (Prof. Junko Kimura).

2010- 2017
Assistant Professor in Department of Pharmacology, School of Medicine, Fukushima Medical University (Prof. Junko Kimura).

2010-2012
Visiting Assistant Professor in Department of Bioengineering and Therapeutic Sciences, University of California San Francisco (Prof. Frances M. Brodsky).

2017-
Assistant Professor in Department of Bio-Informational Pharmacology, University of Shizuoka (Prof. Junko Kurokawa).

Honors and Awards

2006
Young Investigator's Award in the 45th annual meeting of the Pharmaceutical Society of Japan, Tohoku branch

2007
Best Poster Award in the 2nd annual meeting of the Japan Transporter Association

2008
Excellent Investigator's Award in the 35th annual meeting of the Japanese Society of Toxicology

2012
Young Researcher's Award from the Fukushima Society of Medical Science

Grants-in-aid for Young Scientists (B) (No.20790210; 2008-2009), (No.22790257; 2010-2011), and Kiban (C) (No.25460338; 2013-2016) from Japan Society for the Promotion of Science (KAKENHI)

Publications

1. Imaizumi Y, **Sakamoto K**, Yamada A, Hotta A, Ohya S, Muraki K, Uchiyama M, Ohwada T. Molecular basis of pimarane compounds as novel activators of large-conductance Ca^{2+}-activated K^+ channel alpha-subunit. Mol Pharmacol 62: 836–846, 2002.

2. Yamamura H, **Sakamoto K**, Ohya S, Muraki K, Imaizumi Y. Mechanisms underlying the activation of large conductance Ca^{2+}-activated K^+ channels by nordihydroguaiaretic acid. Jpn J Pharmacol 89: 53–63, 2002.

3. Ohwada T, Nonomura T, Maki K, **Sakamoto K**, Ohya S, Muraki K, Imaizumi Y. Dehydroabietic acid derivatives as a novel scaffold for large-conductance calcium-activated K^+ channel openers. Bioorganic Med Chem Lett 13: 3971–3974, 2003.

4. Ohya S, Kuwata Y, **Sakamoto K**, Muraki K, Imaizumi Y. Cardioprotective effects of estradiol include the activation of large-conductance Ca^{2+}-activated K^+ channels in cardiac mitochondria. Am J Physiol Hear Circ Physiol 289: H1635–H1642, 2005.

5. **Sakamoto K**, Nonomura T, Ohya S, Muraki K, Ohwada T, Imaizumi Y. Molecular mechanisms for large conductance Ca^{2+}-activated K^+ channel activation by a novel opener, 12,14-dichlorodehydroabietic acid. J Pharmacol Exp Ther 316: 144–153, 2006.

6. Morimoto T, **Sakamoto K**, Sade H, Ohya S, Muraki K, Imaizumi Y. Voltage-sensitive oxonol dyes are novel large-conductance Ca^{2+}-activated K^+ channel activators selective for beta1 and beta4 but not for beta2 subunits.

Mol Pharmacol 71: 1075–1088, 2007.

7. **Sakamoto K**, Honda T, Yokoya S, Waguri S, Kimura J. Rab-small GTPases are involved in fluvastatin and pravastatin-induced vacuolation in rat skeletal myofibers. FASEB J 21: 4087–4094, 2007.

8. **Sakamoto K**, Mikami H, Kimura J. Involvement of organic anion transporting polypeptides in the toxicity of hydrophilic pravastatin and lipophilic fluvastatin in rat skeletal myofibres. Br J Pharmacol 154: 1482–1490, 2008.

9. Noguchi C, Yang J, **Sakamoto K**, Maeda R, Takahashi K, Takasugi H. Inhibitory Effects of Isoliquiritigenin and Licorice Extract on Voltage-Dependent K^+ Currents in H9c2 Cells. J Pharmacol Sci 108: 439–445, 2008.

10. **Sakamoto K**, Ohya S, Muraki K, Imaizumi Y. A novel opener of large-conductance Ca^{2+} -activated K^+ (BK) channel reduces ischemic injury in rat cardiac myocytes by activating mitochondrial K_{Ca} channel. J Pharmacol Sci 108: 135–139, 2008.

11. Maeda S, **Sakamoto K**, Matsuoka I, Iwamoto T, Kimura J. Lysophosphatidylcholine Increases Na^+/Ca^{2+} Exchanger Expression via RhoB-Geranylgeranylation in H9c2 Cells. J Pharmacol Sci 572: 565–572, 2009.

12. Kimura J, Ono T, **Sakamoto K**, Ito E, Watanabe S, Maeda S, Shikama Y, Yatabe MS, Matsuoka I. Na^+-Ca^{2+} exchanger expression and its modulation. Biol Pharm Bull 32: 325–31, 2009.

13. **Sakamoto K**, Owada Y, Shikama Y, Wada I, Waguri S, Iwamoto T, Kimura J. Involvement of Na^+/Ca^{2+} exchanger in migration and contraction of rat cultured tendon fibroblasts. J Physiol 587: 5345–5359, 2009.

14. Tanaka S, **Sakamoto K**, Yamamoto M, Mizuno A, Ono T, Waguri S, Kimura J. Mechanism of statin-induced contractile dysfunction in rat cultured skeletal myofibers. J Pharmacol Sci 114: 454–463, 2010.

15. **Sakamoto K**, Wada I, Kimura J. Inhibition of Rab1 GTPase and endoplasmic reticulum-to-Golgi trafficking underlies statin's toxicity in rat skeletal myofibers. J Pharmacol Exp Ther 338: 62–69, 2011.

16. Takahashi K, **Sakamoto K**, Kimura J. Hypoxic Stress Induces Transient Receptor Potential Melastatin 2 (TRPM2) Channel Expression in Adult Rat Cardiac Fibroblasts. J Pharmacol Sci 118: 186–197, 2012.

17. **Sakamoto K**, Kimura J. Mechanism of Statin-Induced Rhabdomyolysis. J Pharmacol Sci 123: 289–294, 2013.

18. Hoshino S, **Sakamoto K**, Vassilopoulos S, Camus S, Griffin CA, Esk C, Torres JA, Ohkoshi N, Ishii A, Tamaoka A, Funke BH, Kucherlapati R, Margeta M, Rando TA, Brodsky FM. The CHC22 Clathrin-GLUT4 Transport Pathway Contributes to Skeletal Muscle Regeneration. PLoS One 8: e77787, 2013.

19. Suganami A, **Sakamoto K**. THE INHIBITORY EFFECT OF SHAKUYAKUKANZOTO ON K+ CURRENT IN H9c2 CELLS. FUKUSHIMA J Med Sci 60: 1–9, 2014.

20. Kitamura N, **Sakamoto K**, Ono T, Kimura J. THE INHIBITORY EFFECT OF PACLITAXEL ON (KV2.1) K^+ CURRENT IN H9c2 CELLS. Fukushima J Med Sci 61: 47–53, 2015.

21. Li L, Matsuoka I, **Sakamoto K**, Kimura J. Differential effects of lysophosphatidylcholine and ACh on muscarinic K^+, non-selective cation and Ca^{2+} currents in guinea-pig atrial cells. Fukushima J Med Sci 62: 27–35, 2016.

22. Maejima Y, Aoyama M, **Sakamoto K**, Jojima T, Aso Y, Takasu K, Takenosihita S, Shimomura K. Impact of sex, fat distribution and initial body weight on oxytocin's body weight regulation. Sci Rep 7: 8599, 2017.

23. Ono Y, **Sakamoto K**. Lipopolysaccharide inhibits myogenic

differentiation of C2C12 myoblasts through the Toll-like receptor 4-nuclear factor-κB signaling pathway and myoblast-derived tumor necrosis factor-α. PLoS One 12: e0182040, 2017.

24. Maejima Y, Horita S, Kobayashi D, Aoki M, O'hashi R, Imai R, **Sakamoto K**, Mori M, Takasu K, Ogawa K, Takenoshita S, Zhao S, Hazama A, Shimomura K. Nesfatin-1 inhibits voltage gated K^+ channels in pancreatic beta cells. Peptides 95: 10–15, 2017.

25. **Sakamoto K**. Progress of sarcopenia research. Folia Pharmacol Jpn 149: 186–186, 2017.

26. Tanaka S, Ono Y, **Sakamoto K**. DCEBIO facilitates myogenic differentiation via intermediate conductance Ca^{2+} activated K^+ channel activation in C2C12 myoblasts. J Pharmacol Sci 133: 276–279, 2017.

27. Tohyama S, Fujita J, Fujita C, Yamaguchi M, Kanaami S, Ohno R, **Sakamoto K**, Kodama M, Kurokawa J, Kanazawa H, Seki T, Kishino Y, Okada M, Nakajima K, Tanosaki S, Someya S, Hirano A, Kawaguchi S, Kobayashi E, Fukuda K. Efficient Large-Scale 2D Culture System for Human Induced Pluripotent Stem Cells and Differentiated Cardiomyocytes. Stem Cell Rep 2017. in press