

PUBLICATIONS:

(1-29)

1. Rosen, K. M., Moussa, C. E., **Lee, H. K.**, Kumar, P., Kitada, T., Qin, G., Fu, Q., and Querfurth, H. W. (2009) Parkin reverses intracellular beta-amyloid accumulation and its negative effects on proteasome function. *J Neurosci Res*
2. **Lee, H. K.**, Kumar, P., Fu, Q., Rosen, K. M., and Querfurth, H. W. (2009) The Insulin/Akt Signaling Pathway Is Targeted by Intracellular {beta}-Amyloid. *Mol Biol Cell* 20, 1533-1544
3. Kwon, M. S., Seo, Y. J., Lee, J. K., **Lee, H. K.**, Jung, J. S., Jang, J. E., Park, S. H., and Suh, H. W. (2008) The repeated immobilization stress increases IL-1beta immunoreactivities in only neuron, but not astrocyte or microglia in hippocampal CA1 region, striatum and paraventricular nucleus. *Neurosci Lett* 430, 258-263
4. Suh, H. W., **Lee, H. K.**, Seo, Y. J., Kwon, M. S., Shim, E. J., Lee, J. Y., Choi, S. S., and Lee, J. H. (2005) Kainic acid (KA)-induced Ca(2+)/Calmodulin-dependent protein kinase II (CaMK II) expression in the neurons, astrocytes and microglia of the mouse hippocampal CA3 region, and the phosphorylated CaMK II only in the hippocampal neurons. *Neurosci Lett* 381, 223-227
5. **Lee, H. K.**, Seo, Y. J., Choi, S. S., Kwon, M. S., Shim, E. J., Lee, J. Y., and Suh, H. W. (2005) Role of gamma-aminobutyric acid B (GABA(B)) receptors in the regulation of kainic acid-induced cell death in mouse hippocampus. *Exp Mol Med* 37, 533-545
6. Kwon, M. S., Shim, E. J., Seo, Y. J., Choi, S. S., Lee, J. Y., **Lee, H. K.**, and Suh, H. W. (2005) Differential modulatory effects of cholera toxin and pertussis toxin on pain behavior induced by TNF-alpha, interleukin-1beta and interferon-gamma injected intrathecally. *Arch Pharm Res* 28, 582-586
7. Kwon, M. S., Shim, E. J., Seo, Y. J., Choi, S. S., Lee, J. Y., **Lee, H. K.**, and Suh, H. W. (2005) Effect of Aspirin and Acetaminophen on Proinflammatory Cytokine-Induced Pain Behavior in Mice. *Pharmacology* 74, 152-156
8. Han, K. J., Choi, S. S., Shim, E. J., Seo, Y. J., Kwon, M. S., Lee, J. Y., **Lee, H. K.**, and Suh, H. W. (2005) Formalin pretreatment attenuates tail-flick inhibition induced by beta-endorphin administered intracerebroventricularly or intrathecally in mice. *Arch Pharm Res* 28, 227-231
9. Han, K. J., Choi, S. S., Lee, J. Y., **Lee, H. K.**, Shim, E. J., Kwon, M. S., Seo, Y. J., and Suh, H. W. (2005) Antinociceptive effect of nicotine in various pain models in the mouse. *Arch Pharm Res* 28, 209-215
10. Choi, S. S., Seo, Y. J., Kwon, M. S., Shim, E. J., Lee, J. Y., Ham, Y. O., **Lee, H. K.**, and Suh, H. W. (2005) Increase of phosphorylation of calcium/calmodulin-dependent protein kinase-II in several brain regions by substance P administered intrathecally in mice. *Brain Res Bull* 65, 375-381
11. Suh, H. W., Choi, S. S., Lee, J. K., **Lee, H. K.**, Han, E. J., and Lee, J. (2004) Regulation of c-fos and c-jun gene expression by lipopolysaccharide and cytokines in primary cultured astrocytes: effect of PKA and PKC pathways. *Arch Pharm Res* 27, 396-401
12. **Lee, H. K.**, Choi, S. S., Han, K. J., Han, E. J., and Suh, H. W. (2004) Roles of adenosine receptors in the regulation of kainic acid-induced neurotoxic responses in mice. *Brain Res Mol Brain Res* 125, 76-85
13. **Lee, H. K.**, Choi, S. S., Han, E. J., Lee, J. Y., Kwon, M. S., Shim, E. J., Seo, Y. J., and Suh, H. W. (2004) Role of nicotinic acetylcholine receptors in the regulation of kainic acid-induced hippocampal cell death in mice. *Brain Res Bull* 64, 309-317
14. Kim, H. S., Cho, J. Y., Kim, D. H., Yan, J. J., **Lee, H. K.**, Suh, H. W., and Song, D. K. (2004) Inhibitory effects of long-term administration of ferulic acid on microglial activation induced by intracerebroventricular injection of beta-amyloid peptide (1-42) in mice. *Biol Pharm Bull* 27, 120-121
15. Choi, S. S., **Lee, H. K.**, Shim, E. J., Kwon, M. S., Seo, Y. J., Lee, J. Y., and Suh, H. W. (2004) Alterations of c-Fos mRNA expression in hypothalamic-pituitary-adrenal axis and various brain regions induced by intrathecal single and repeated substance P administrations in mice. *Arch Pharm Res* 27, 863-866
16. Choi, S. S., Han, E. J., Lee, T. H., Han, K. J., **Lee, H. K.**, and Suh, H. W. (2004) Antinociceptive profiles of platycodin D in the mouse. *Am J Chin Med* 32, 257-268

17. Lee, J. K., Choi, S. S., **Lee, H. K.**, Han, K. J., Han, E. J., and Suh, H. W. (2003) Effects of ginsenoside Rd and decursinol on the neurotoxic responses induced by kainic acid in mice. *Planta Med* 69, 230-234
18. **Lee, H. K.**, Choi, S. S., Han, K. J., Han, E. J., and Suh, H. W. (2003) Cycloheximide inhibits neurotoxic responses induced by kainic acid in mice. *Brain Res Bull* 61, 99-107
19. **Lee, H. K.**, Choi, S. S., Han, E. J., Han, K. J., and Suh, H. W. (2003) Role of glutamate receptors and an on-going protein synthesis in the regulation of phosphorylation of Ca²⁺/calmodulin-dependent protein kinase II in the CA3 hippocampal region in mice administered with kainic acid intracerebroventricularly. *Neurosci Lett* 348, 93-96
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22. Choi, S. S., Han, K. J., Lee, J. K., **Lee, H. K.**, Han, E. J., Kim, D. H., and Suh, H. W. (2003) Antinociceptive mechanisms of orally administered decursinol in the mouse. *Life Sci* 73, 471-485
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24. Choi, S. S., Han, K. J., **Lee, H. K.**, Han, E. J., and Suh, H. W. (2003) Antinociceptive profiles of crude extract from roots of *Angelica gigas* NAKAI in various pain models. *Biol Pharm Bull* 26, 1283-1288
25. Choi, S. S., Han, E. J., Han, K. J., **Lee, H. K.**, and Suh, H. W. (2003) Antinociceptive effects of ginsenosides injected intracerebroventricularly or intrathecally in substance P-induced pain model. *Planta Med* 69, 1001-1004
26. Lee, J. K., Choi, S. S., **Lee, H. K.**, Han, K. J., Han, E. J., and Suh, H. W. (2002) Effects of MK-801 and CNQX on various neurotoxic responses induced by kainic acid in mice. *Mol Cells* 14, 339-347
27. Jang, C. G., Lee, S. Y., **Lee, H. K.**, Suh, H. W., and Song, D. K. (2002) Time courses of pCREB expression after dopaminergic stimulation by apomorphine in mouse brain. *Arch Pharm Res* 25, 370-374
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29. Park, J., **Lee, H.**, Lee, Y., Kang, Y. H., Rhim, H., and Choi, S. Y. (2000) Expression of Human Immunodeficiency Virus Type 1 Tat Proteins in *Escherichia coli* and Application to Study Tat Functions. *J Biochem Mol Biol* 33, 337-343

MS and Ph.D. DISSERTATION

1. Purification and Characterization of Human Immunodeficiency Virus Type-1 (HIV-1) Tat protein. MS Dissertation. Genetic Engineering. Hallym University, Chunchon, South Korea. 2001.2.
2. Study on neurotransmitters involved in the hippocampal neuronal loss induced by kainic acid. Ph.D. Dissertation. Department of Pharmacology, Collage of medicine, Hallym University, Chunchon, South Korea. 2003.8.

PRESENTATION IN CONFERENCE

a. PRESENTATIONS IN KOREA

1. **Hangyu Lee**, Jiyoong Ryu, Hyangshuk Rhim, Soo Young Choi, Jinseu Park. Expression and Purification of the Biologically Active Human Immunodeficiency Virus Type 1 Tat Protein. Annual Meeting of The Korean Society for Molecular and Cellular Biology. 1998. Seoul.
2. **Hangyu Lee**, Jiyoong Ryu, Hyangshuk Rhim, Soo Young Choi, Jinseu Park. Expression and Purification of the Biologically Active Human Immunodeficiency Virus Type 2 Tat Protein. The Korean Society of Virology 31th Annual Meeting. 1999. 11. 5. ChunChon, Kangwon National University.
3. **Han-Kyu Lee**, Sung-Oh Huh, Hong-Won Suh Dong-Keun Song, Choon-Gon Jang: Upregulation of neuronal NOS immunoreactivity in the mouse striatum and hippocampus following treatment with apomorphine. 10/20-21/2000 Annual Meeting of The Korean Society of Pharmacology. Kyung Hee University. Seoul.
4. Choon-Gon Jang, **Han-Kyu Lee**, Ing Kang Ho: AMPA-sensitive glutamatergic involvement in expression of the morphine withdrawal in rat brain. 10/20-21/2000 Annual Meeting of The Korean Society of Pharmacology. Kyung Hee University. Seoul.
5. **Han-Kyu Lee**, Sung Oh Huh, Hong Won Suh, Dong Keun Song, Yung Hi Kim, Choon-Gon Jang: TIME COURSE CHANGES IN PHOSPHOR-CREB IMMUNOREACTIVITY INDUCED BY DOPAMINERGIC STIMUATION IN THE MOUSE BRAIN. 12/1-2/2000 Annual Meeting of the Korean Society for Brain and Neural Sciences. Seoul National University. Seoul.
6. Choon Gon Jang, **Han kyu Lee**, Sung Oh Huh, Hong Won Suh, Dong Keun Song, Yung Hee Kim, Seok Yong Lee: SPATIAL LEARNING AND ELEVATED PLUS MAZE ARE CHANGED IN MICE DEFICIENT FOR μ -OPIOID RECEPTORS. 11/5-6/2001. Annual Meeting of The Korean Society of Pharmacology. Paradise Hotel Busan. Busan.
7. Seong-Soo Choi, **Han-Kyu Lee**, Jin-Koo Lee, Ki-Jung Han, Dong-Keun Song, Sung-Oh Huh, Yung-Hi Kim, Hong-Won Suh: CHARACTERIZATION OF c-FOS, pERK AND pCREB IMMUNOREACTIVITIES INDUCED BY GLUTAMATE, SUBSTANCE P AND CAPSAICIN ADMINISTERED INTRATHECALLY IN THE MOUSE HYPOTHALAMUS. 11/5-6/2001. Annual Meeting of The Korean Society of Pharmacology. Paradise Hotel Busan. Busan.
8. Jin-Koo Lee, **Han-Kyu Lee**, Seong-Soo Choi, Ki-Jung Han, Dong-Keun Song, Sung-Oh Huh, Yung-Hi Kim, Hong-Won Suh: The involvements of several neurotransmitter on the kainic acid induced cell death in hippocampus. 11/5-6/2001. Annual Meeting of The Korean Society of Pharmacology. Paradise Hotel Busan. Busan.
9. Jin-Koo Lee, **Han-Kyu Lee**, Seong-Soo Choi, Ki-Jung Han, Dong-Keun Song, Sung-Oh Huh, Yung-Hi Kim, Hong-Won Suh: Effects of MK-801 and CNQX on Various Responses Induced by Kainic Acid in Mice. 11/30-12/1/2001. Annual Meeting of the Korean Society for Brain and Neural Sciences. Seoul National University. Seoul.
10. Choon Gon Jang, Hyung Kuk Kim, Eun Mi Yang, Seok Yong Lee, **Han Kyu Lee**, Dong Keun Song, Hong Won Suh, Sung Oh Huh, Yung Hi Kim: SPATIAL LEARNING AND ELEVATED PLUS MAZE ARE CHANGED IN MICE DEFICIENT FOR μ -OPIOID RECEPTORS. 11/30-12/1/2001. Annual Meeting of the Korean Society for Brain and Neural Sciences. Seoul National University. Seoul.
11. **Han-Kyu Lee**, Seong-Soo Choi, Ki-Jung Han, Eun-Jung Han, Hong-Won Suh: Roles of Adenosine Receptors and On-going Protein Synthesis in the Regulation of Kainic Acid-induced Neurotoxic Responses in Mice. 4/24/2002. Annual Meeting of the Korean Society for Brain Science. Seoul National University. Seoul.
12. Seong-Soo Choi, **Han-Kyu Lee**, Ki-Jung Han, Eun-Jung Han, Hong-Won Suh: Regulation of pERK and pCaMKII Expressions in Pain-Related Regions by Intrathecal Substance-P Injection: Differential Effects of Morphine and β -Endorphin. 9/28-10/1/2002. FAONS Neuroscience Meeting, Seoul.

13. Hong-Won Suh, **Han-Kyu Lee**, Seong-Soo Choi, Ki-Jung Han, Eun-Jung Han: Roles of Adenosine Receptors in the Regulation of Kainic Acid-induced Neurotoxic Responses in Mice. 10/14-15/2002. Annual Meeting of The Korean Society of Pharmacology. Chungcheongbuk-do Province Millennium Town. Cheongju.
14. Ki-Jung Han, Seong-Soo Choi, **Han-Kyu Lee**, Eun-Jung Han, Hong-Won Suh: Analgesic effect of nicotine in various types of pain in the mouse. 10/14-15/2002. Annual Meeting of The Korean Society of Pharmacology. Chungcheongbuk-do Province Millennium Town. Cheongju.
15. **Han-Kyu Lee**, Seong-Soo Choi, Ki-Jung Han, Eun-Jung Han, Hong-Won: Suh Study on neurotransmitters involved in the cell death induced by excitatory amino acid. Health Industry Technologies Exposition Korea 2002. 12/13-14/2002. COEX. Seoul.
16. **Han-Kyu Lee**, Seong-Soo Choi, Eun-Jung Han, and Hong-Won Suh*: Kainic acid (KA)-induced Ca^{2+} /calmodulin dependent protein kinase II (CaMK II) expression in the neurons, astrocytes and microglia of the mouse hippocampal CA3 region, and the phosphorylated CaMK II only in the hippocampal neurons. Annual Meeting of the Korean Society for Brain and Neural Sciences. 11/19-20/2003. Seoul.
17. Eun-Jung Han, Seong-Soo Choi, **Han-Kyu Lee** and Hong-Won Suh*: Study on hypothalamic proopiomelanocortin gene expression induced by intraplantar formalin in mice. Annual Meeting of the Korean Society for Brain and Neural Sciences. 11/19-20/2003. Seoul.
18. Seong-Soo Choi, Eun-Jung Han, **Han-Kyu Lee** and Hong-Won Suh: The Possible Involvement of Phosphorylated Ca^{2+} /Calmodulin-Dependent Protein Kinase II in the Mouse Formalin and Substance P Pain Models. Annual Meeting of the Korean Society for Brain and Neural Sciences. 11/19-20/2003. Seoul.
19. **Han-Kyu Lee**, Young-Ok Hahm, Eon-Jeong Shim, Min-Su Kwon, Young-Jun Seo, Jin-Young Lee, Soo-Hyun Park, Seong-Soo Choi, and Hong-Won Suh: Chronic restraint (immobilization) stress induces GFAP, OX-42, IL-1 β , Fra-1, Fra-2, and p-CaMKII immunoreactivity in some brain regions of mouse. Annual Meeting of the Korean Society for Brain and Neural Sciences. 4/30/2004. Daejeon.

b. PRESENTATIONS IN USA

1. Jin-Koo Lee, Seong-Soo Choi, Mi-Ran Choi, **Han-Kyu Lee**, Hong-Won Suh: Roles of NMDA and non-NMDA receptors in the regulation of toxicological response induced by kainic acid administered supraspinally. 11/10-15/2001. Society for Neuroscience's 31th Annual Meeting. San Diego, CA, USA
2. Seong-Soo Choi, **Han-Kyu Lee**, Ki-Jung Han, Eun-Jung Han, Hong-Won Suh: Profiles of several signal transduction molecules induced by intrathecal substance P in pain-related brain regions: Differential effects of opioids. 8/17-22/2002 IASP 10th World Congress on Pain. San Diego, CA, USA
3. **Han-Kyu Lee**, Kenneth M. Rosen, Jordi Magrane, and Henry W. Querfurth: How does A β affect Akt signaling? 11/12-16/2005 Society for Neuroscience's 35th Annual Meeting. Washington DC, USA
4. P. Kumar, Q. Fu, **H. K. Lee**, K. M. Rosen H. W. Querfurth: Cytoprotection and abrogation of cell cycle re-entry by cyclin inhibitors and molecular chaperones in β -amyloid producing muscle cells. 11/3-7/2007 Neuroscience Meeting, 2007, San Diego, USA
5. Pravir Kumar, Qinghao Fu, **Han-Kyu Lee**, Henry Querfurth: Cell Cycle Re-entry and the Role of Molecular Chaperones in β -Amyloid Laden Skeletal Muscle Cells and Alzheimer's Disease Brain. TUFTS University A Research Day on Translational Research: Applying Discovery. November 29, 2007 Jean Mayer USDA Human

6. **Han-Kyu Lee**, Edward Rocnik, Kenneth Walsh, Qinghao Fu, Kenneth Rosen, and Henry Querfurth: Foxo/Atrogin induction in skeletal muscle by intracellular β -amyloid. 11/15-19/2008 Neuroscience Meeting, 2008, Washington DC, USA
7. **H.K. Lee**¹, C. Moussa¹, G. Qin², T. Kitada³, K.M. Rosen¹, P. Kumar¹, Q. Fu¹ H.W. Querfurth¹ : Parkin reverses intracellular β -amyloid accumulation and its negative effects on proteasome function. September 15, 2009 7th Annual Alzheimer's Research Day Boston University School of Medicine, Boston, USA
8. **Lee, H. K.**, Kumar, P., Qin, G., Kitada, T., Rosen, K. M., Fu, Q., Moussa, C. E., Querfurth, H. W. : Parkin reverses intracellular beta-amyloid accumulation and its negative effects on proteasome function. 10/17–21/2009 Neuroscience Meeting, 2009, Chicago, Ill, USA