

주요 연구 실적

- Patents

1. Method for making activated neutrophils recognizable to macrophages' US PATENT & TRADEMARK OFFICE 924289 (1997)
2. Methods of screening for compounds which mimic galectin-1' US PATENT & TRADEMARK OFFICE 929291 (1999)
3. rpoB 유전자를 이용한 리팜핀 내성 또는 감수성 스트렙토미세스속 균주의 동정방법, 및 리팜핀 내성 또는 감수성 균주 특이적 프라이머' 조문제 외 4인 0464259 (2004)
4. 산삼배양근 추출물을 함유하는 간 섬유화 치료용 조성물' 조문제 외 4인 2004. 09.03 등록 제 0448552호
5. 산삼 배양근 추출물을 함유하는 간 섬유화 개선용 식품' 조문제외 4인 2005. 02.04 등록 제 0472220호
6. 산삼 모상근 제조방법' 조문제 외 3인 2005.09.09 등록 제 0515668호
7. 파일럿 규모의 이동식 생물배양장치 조문제외 4인 2006.08.11 등록 제 10-0614257호
8. 스트렙토마이세스속 유래 신규 항균 화합물 조문제 외2인 2008. 4. 등록 제 10-0823696호
9. 당유자 미성숙과 추출물 또는 당유자잎 추출물을 함유하는 항암용 약학 조성물 조문제 외 4인 07.03.30 출원 10-2007-0041017
10. 신규리모노이드 UDP-당전이 효소 및 그 제조방법 조문제 외 2인 07.03.30 출원 10-2007-0022185
11. herbal composition for preventing and improving baldness disorder 조문제 외 10인 2008.2.13 등록 PCT/KR2008/000576
12. cosmetic composition for preventing and improving baldness 조문제 외 10인 2008.2.13 등록 PCT/KR2008/000577
13. 돼지태반 추출물을 함유하는 조성물 조문제 외6인 2008.5.6.출원 10-2008-0041747

14. 노랑하늘타리 추출물을 유효성분으로 함유하는 탈모 질환의 예방 및 치료용 조성물 조문제 외 8인 2009. 11.17 등록 10-0928377
15. 노랑하늘타리 추출물을 유효성분으로 함유하는 탈모 방지 및 발모 개선용 조성물 조문제 외 7인 2009.11.17 등록 10-0928378
16. 홍해삼으로부터의 콜라겐의 분리방법 조문제 외 8인 2010.09.30 10-2010-0095097
17. 홍해삼 추출물을 이용한 항알러지제 조성물 및 항균제 조성물 조문제 외 8인 2010.09.30 10-2010-0095098
18. 홍해삼을 이용한 김치의 제조 방법 조문제 외 3인 2010.09.30 10-2010-0095487
19. 상처 치료, 상처 회복 또는 흉터 생성 억제용 피부 외용제 조성물. 조문제 외 4인 2014.06.30 출원. 10-2014-0081073
20. 신규한 상처 치료, 상처 회복 또는 흉터 생성 억제용 피부 외용제 조성물 및 그를 이용한 상처 치료 방법. 조문제 외 5인. 2016.01.10 등록 . 101587233
21. 세포 이동을 유도하는 플라보노이드 및 그 용도. 조문제 외 5인. 2015.03.25 등록. 101507370
22. 신규 플라보노이드 및 그 용도 조문제 외 4 인. 2018.02.16. PCT 등록 유지 ZL20138007
23. 신규 플라보노이드 및 그 용도 조문제 외 4 인. 2016.02.01. 등록 유지 10-1592560
24. 4',6,7-트리메톡시이소플라본과 카테콜을 이용한 폐섬유화 증 개선용 조성물 KR20200084225A, PCT/KR2021/ 008552

- Refereed Journal Articles

1. Jung, J., Kim, H-J., and Cho, M. Action spectra for the generation of singlet oxygen from mitochondrial membrane from soybean (glycine max) hypocotyls photochem. Photobiol. 52, 561-566 (1997)
2. Cho M, Richard D. Cummings Structure and biosynthesis of carbohydrate ligands for

animal lectins involved in cell adhesion

Biochem. Soc. Trans., Vol.22 pp.378-381 (1994)

3. Cho, M and Richard D. Cummings., Galectin-1, a β -Galactoside-binding Lectin in Chinese Hamster Ovary Cells, I. Physical and Chemical Characterization, J. Biol. Chem. Vol. 270, pp. 5198-5206(1995)

4. Cho, M and Richard D. Cummings, galectin-1, a β -Galactoside-binding Lectin in Chinese Hamster Ovary Cells, II. Localization and Biosynthesis J. Biol. Chem. Vol. 270, pp. 5207-5212,(1995).

5. Cho, S. K., Yeh, J-C., Cho, M. and Cummings, R. D., transcriptional regulation of α 1,3-galactosyltransferase in embryonal carcinoma cells by retinoic acid J. Biol. Chem. 271, pp. 3238-3246(1996)

6. Cho, M. and Cummings R. D., Characterization of monomeric forms of galectin-1 generated by site-directed mutagenesis, Biochemistry 35, pp. 13081-13088 (1996)

7. Gupta, D., Cho, M. Cummings, R. D. and Brewer, F., Thermodynamics of carbohydrate binding to galectin-1 from Chinese hamster ovary cells and two mutant. A comparison with four galactose-specific plant lectins
Biochemistry 35, pp. 15263-15243(1996)

8. Prieto, P. A., Cho, M., Larsen, R. D. Rivera, H. N., Shiltifard, A., Lowe, J. B., Cummings, R. D., and Smith, D. F., Expression of human H-type α 1,2 fucosyltransferase encoding for blood group H(O) antigen in Chinese hamster ovary cells: Evidence for preferential fucosylation and truncation of Polylectosamine sequences, J. Biol. Chem. 272, pp. 2089-2097. (1997)

9. Cho, M., and Cummings, R. D., Galectin-1: Oligomeric Structure and Interactions with Polylectosamine, Forum Carbohydrates Coming of Age., TIGG 9, pp. 47-56. (1997)

10. Boo, Y. C., Cho, M., and Jung, J. Protective Effect of Artificially Enhanced Level of L-Ascorbic Acid against Water Deficit-Induced Stress in Rice Seedlings. Agric. Chem. Biotechnol. 42, 66-70 (1999)

11. Cho, M. 'Molecular characterization of Glycinecin A gene Promoter isolated from Xanthomonas campestris Pv. Glycines 8ra Cheju J. life sci. 2 :109 ~ 123 (1999)

12. Dong Chung Kim, Ji Young Lee, Cho M. and Woo Ik Hwang.
A study on the anticancer activity of propolis J. food Sci. Nutrition 5 :54 ~ 57 (2000)
12. Bong Woo Ko, Eun Hae Park, Dong Sik Kim, Sung Hyun Bang, Joo Yeon Jin, Dae Sung Kim, Chang Wan Ju, Kyung Kap Lee, M. Cho, Somi Kim Cho, Bong Hee Lee, Key Zung Riu, Min Kyoung Park and Young Jae Lee
The Roles of Excitatory Amino Acid system in the Organophosphate-induced Brain Damage
J. Korean Soc. Agric. Chem. Biotechnol. Vol.44 No.3 pp.148-152 (2001)
13. Kyung Hwan Boo, Somi Kim Cho, Seong Beom Jin, Hyun Byung Chae, Do Seung Lee, Dae Woon Kim, M. Cho and Key Zung Riu
Isolation of Genes Involved in Ecdysteroids Biosynthesis from *Achyranthes japonica* Nakai J. Korean Soc. Agric. Chem. Biotechnol. Vol.44 No.3 pp.153-161 (2001).
15. Hyun Byung Chae, Kyung Hwan Boo, Seong Beom Jin, Do Seung Lee, Dae Woon Kim, M. Cho and Key Zung Riu Effects of Light and Some Plant Growth Regulators on Ecdysteroids Contents in *Polypodium vulgare* L. and *Achyranthes japonica* Nakai J. Korean Soc. Agric. Chem. Biotechnol. Vol.44 No.3 pp.162-166 (2001)
16. Koh, M.H, Oh, M., Lee, Y.J., Cho M., and Lee, B.H. CNS cholinergic innervation to the hippocampus in the rat using pseudorabies virus as a neurotracer J. Kor. Med. Sci. 16 :290 ~ 213(2000)
17. Somi Kim, and M. Cho, Binding of galectin-1 to neutrophils enhanced by activation. Agric. Chem. Biotechnol 43 :131 ~ 135(2001)
18. Youngmi Kim, Somi Kim, and M. Cho. Improvement in the stability of glycinecinA through protein fusion of the two structural components J. Microbiol. 39 :177 ~ 180(2001)
19. Heu, S., Oh, J.H., Kang, Y.S., Rhu, S., Cho, Y.S., and M. Cho, gly Gene cloning and Expression and Purification of Glycinecin A, a Bacteriocin produced by *Xanthomonas campestris* pv. *glycines* 8ra. Appl. Environ. Microbiol. 67 :4105 ~ 4110(2001)
20. Yong Ho Jeon, M. Cho, Yong Sup Cho and Ingyu Hwang. Effect of GlycinecinA on the Control of Bacterial Leaf Spot of Red Pepper and Bacterial Leaf Blight of Rice The Plant Pathology Journal 17(5):249-256(2001)
21. Kim, B.J., Cho, M., Kim, J.C., Cho, K.W., Choi, K.J., Lee, C.H., and Lim, Y.H.

Streptomyces showing antifungal activity against six plant pathogenic fungi

J. Microbiol. Biotechnol. 11, 1120-1123 (2001)

22. Lim, H-K., Kang, H.K., Yoo, E.S, Kim, B.J., Kim, Y.W., Cho, M., Lee, J.W., Lee, Y.S, Chung, M.H., Hyun, J.W Oxysterols induce apoptosis and accumulation of cell cycle at G2/M phase in the human monocytic THP-1 cell line. Life Sciences 72, 1389-1399 .(2003)

23. Dias-Baruffi, M, Zhu, H., Cho, M., Karmakar, S., McEver, R. P., Cummings, R.D. Dimeric galectin-1 induces surface exposure of phosphatidylserine and phagocytic recognition of leucocyte without inducing apoptosis. J. Biol. Chem. 278, 41282-41293 (2003)

24. Kim, Y.M., Cho, S.K. and Cho, M. Mass-Production of Acetylcholinesterase sensitive to organophosphates and carbamates insecticides. J. Korean Soc. Agric. Chem. Biotechnol. 46, 353-360 (2003)

25. Kim, Bum-Joon, Young-Hwan Koh, Jong Sik Chun, Chang-Jin Kim, Seung-Hyun Lee, M. Cho, Jin-Won Hyun, Keun-Hwa Lee, Chang-Yong Cha, Yoon-Hoh Kook Differentiation of Actinomycete Genera Based on Partial *rpo B* Gene Sequences J. Microbiol. Biotechnol. pp.846-852 (2003)

26. Young Mee Kim, Hee Kyoung Lim, Somi K. Cho, Yun Woo Kim, Jinwoon Hyun, Bong Hee Lee, Bum-Joon Kim, Key Zoung Riu, Young Jae Lee, M. Cho Cloning of the *Xanthomonas campestris* pv *glycines* 8ra gene for glycinecin A secretion World J. Microbiol. & Biotech., pp.99-103 (2003)

27. Yoon-Suk Kang, Young-Bae Chung, Moonjae Cho Purification and Characterization of proteinase from *Ruditapes philippinarum* infected with *Perkinsus* sp. Cheju Journal of medicine Vol.1 No.1 pp.53-56 (2003)

28. Alexander A. Bulgakov, Kyung-Il Park, Kwang-Sik Choi, Hee-Kyoung Lim, M. Cho Purification and characterisation of a lectin isolated from the Manila clam *Ruditapes philippinarum* in Korea Fish & Shellfish Immunology, pp.487-499 (2004) Apr.

29. Huy Thang Pham, Key Zoung Riu, Kong Man Jang, Somi K. Cho, Moonjae Cho Bactericidal Activity of Glycinecin A, a Bacteriocin Derived from *Xanthomonas campestris* pv. *glycines*, on Phytopathogenic *Xanthomonas campestris* pv. *vesicatoria* Cells Applied and Environ. Microbiol., Vol.70 No.8 pp.4486-4490 (2004) Aug

30. 최광식, 박경일, 조문제, philippe soudant, Diagnosis, Pathology, and Taxonomy of perkinsus sp. isolated from the manila clam *Ruditapes philippinarum* 한국양식학회지18(3) 207-214 2005/08/31

31. Dae Sung Kim, Sung Tae Cho, Moon Jae Cho, Young Goo Lee
Effect of Galectin-3 Gene Transfer for the Apoptosis and Cell Growth of the Prostate Cancer Cell Line(LNCaP Cells) The Korean Journal of Urology Vol. 46 No. 12 pp1354-1359 (2005) 12월

32. Kyunghee Byun, Jaewoo Kim, Sang-Yun Cho, Brian Hutchinson, Se-Ran Yang, Kyung-Sun Kang, Moonjae Cho, Kyukye Hwang, Makoto Michikawa, Young-Wook Jeon, Young-Ki Paik and Bonghee Lee Alteration of the glutamate and GABA transporters in the hippocampus of the Niemann-Pick disease, type C mouse using proteomic analysis
Proteomics Vol. 6(4). 1230-1236 (2006), 23. jan

33.Yoon-Suk Kang, Young-Mee Kim, Kyung-Il Park, Somi Kim Cho, Kwang-Sik Choi, Moonjae Cho. Analysis of EST and lectin expressions in hemocytes of Manila clams (*Ruditapes philippinarum*) (Bivalvia: Mollusca) infected with *Perkinsus olseni*, Developmental & Comparative Immunology, Vol. 30(12) 1119-1131 (2006) Epub 2006 Apr 25.

34. Kyung-Il Park, ThaoT.T, Ngo, Sang-Duk Choi, Moonjae Cho, Kwang-Sik Choi. Occurrence of *Perkinsus olseni* in the Venus clam *Protothaca jedomensis* in Korean waters Journal of INVERTEBRATE PATHOLOGY. Vol. 93(2) 81-87 (2006) Epub 2006 Jun 9

35. Young Mee Kim, Kyung-Il Park, Kwang-Sik Choi, Richard A. Alvarez, Richard D. Cummings, and Moonjae Cho lectin from the Manila Clam *Ruditapes philippinarum* is induced upon infection with the protozoan parasite *Perkinsus olseni*. The Journal of Biological Chemistry Vol. 281(37) 26854-26864 (2006) Epub 2006 Jun 19.

36. 김영미, 김진영, 조문제, 장공만, 현해남, 김소미 유기인계 및 카바메이트계 농약을 측정할 수 있는 바이오 센서의 개발
한국응용생명화학학회 49(4) 315-321 2006/12/27

37. Hee Kyoung Lim, Youn Woo Kim, Dae Ho Lee, Somi Kim Cho, and Moonjae Cho The Antifibrotic and Antioxidant Activities of Hot Water Extract of Adventitious Root Culture of *Panax ginseng* (ARCP)
J. Appl. Biol. Chem. 50(2), 78-84 (2007) Accepted June 15, 2007

38. 부경환, 김하나, 류기중, 김연우, 조문제, 김소미 Liquid chromatography-mass spectrometry (LC-MS)에 의한 당유자 과실의 리모노이드 함량 분석 한국응용생명화학회 50(3) 238-243 2007/08/30
39. Kim YB, Choi S, Choi MC, Oh MA, Lee SA, Cho M, Mizuno K, Kim SH, Lee JW. Cell adhesion-dependent cofilin serine 3 phosphorylation by the integrin-linked kinase.c-*Src* complex. *J Biol Chem.* 283(15):10089-96 2008 Apr 11. Epub 2008 Feb 5.
40. Kim JY, Kim YM, Cho SK, Choi KS, Cho M. Noble tandem-repeat galectin of Manila clam *Ruditapes philippinarum* is induced upon infection with the protozoan parasite *Perkinsus olseni*. *Dev Comp Immunol.* 2008;32(10):1131-41. Epub 2008 Apr 7.
41. 홍민희, 임희경, 박지은, 전능재, 이영재, 조문제, 김소미 산삼배양근 추출물의 혈압강하 및 혈관이완 효과 응용생명화학회지. 51(2) 102-107 2008/6/6
42. Y.-S. Kang, K-S. Choi, Y.B.Chung, S.Kim and M.Cho Protease associated with lectin produced by *perkinsus olseni* infected Manila clams (*Ruditapes philippinarum*) *Bull. Eur. Ass. Fish. Pathol.*, 28(3) 2008 89-96 2008/08/22
43. Kim JY, Adhya M, Cho SK, Choi KS, Cho M. Characterization, tissue expression, and immunohistochemical localization of MCL3, a C-type lectin produced by *Perkinsus olseni*-infected Manila clams (*Ruditapes philippinarum*). *Fish Shellfish Immunol.* 2008 Nov;25(5):598-603. Epub 2008 Aug 5.
44. Hee-Kyoung Lim, Jeong Yong Moon, Hana Kim, Moonjae Cho and Somi Kim Cho Induction of apoptosis in U937 human leukemia cells by the hexane fraction of an extract of immature *Citrus grandis* Osbeck fruits *Food Chemistry*.accepted 2008/10/31 (2009) june 15 114 1245-1250
45. Sean R. Stowell, Moonjae Cho, Christa L. Feasley, Conne M. Arthur, Xuezheng Song, Jennifer K. colucci, Sougata Karmakar, Padmaja Mehta, Marcelo Dias-Baruffi, Rodger P. McEver, Richard. Cummings. Ligand reduces galcetin-1 sensitivity to oxidative inactivation by enhancing dimmer formation *JBC* 2008/12/22 2009 02 20 284(4) 4989-4999
46. Sin-Ae Lee, Hyung Won Ryu, Young Mee Kim, Suyong Choi, Mi Ji Lee, Tae Kyounh Kwak, Hyeon Jung Kim, Moonjae Cho, Ki Hun Park, Jung Weon Lee. Blockade of four-transmembrane L six family member 5 (TM4SF5)-mediated tumorigenicity in hepatocytes by a synthetic chalcone derivative *Hepatology* 2008/12/8 2009 apr 49 1316-1325

47. Yoon-Suk Kang, Yukyung Lee, Somi K. Cho, Keun-Hwa Lee, Bum-Joon Kim, Minkyun Kim, Yoongho Lim & Moonjae Cho Antibacterial activity of a disaccharide isolated from *Streptomyces* sp. strain JJ45 against *Xanthomonas* sp. FEMS Microbiol Lett 294 (2009) 119–125. 2009/03/18

48. Jeong Yong Moon, Hana Kim, Moonjae Cho, Weon Young Chang, Cheong-Tae Kim, Somi Kim Cho Induction of Apoptosis in SNU-16 Human Gastric Cancer Cells by the Chloroform Fraction of an Extract of Dangyuja (*Citrus grandis*) Leaves Journal of Korean Society for Applied Biological Chemistry 52(2) (2009) 168-175 2009/03/02

49. Lee SA, Kim YM, Kwak TK, Kim HJ, Kim S, Ko W, Kim SH, Park KH, Kim HJ, Cho M, Lee JW. The extracellular loop 2 of TM4SF5 inhibits integrin $\alpha 2$ on hepatocytes under collagen type I environment. *Carcinogenesis*. 2009 Nov;30(11):1872-9. Epub 2009 Sep 29.

50. Park JE, Chang WY, Cho M. Induction of matrix metalloproteinase-9 by galectin-7 through p38 MAPK signaling in HeLa human cervical epithelial adenocarcinoma cells. *Oncol Rep*. 2009 Dec;22(6):1373-9.

51. Kim YM, Park JE, Kim JY, Lim HK, Nam JK, Cho M, Shin KS. Genetic analysis of 10 unrelated Korean families with p22-phox-deficient chronic granulomatous disease: an unusually identical mutation of the CYBA gene on Jeju Island, Korea. *J Korean Med Sci*. 2009 Dec;24(6):1045-50. Epub 2009 Nov 9.

52. M. Jasim Uddin, Hyun-sung Yang, and Kwang-sik Choi, Hyo-Jin Kim and Jae-sang Hong, Moonjae Cho Seasonal changes in perkinsus olsenii infection and gametogenesis in Manila clam, *Ruditapes philippinarum*, from Seonjaedo Island in Incheon, off the west coast of Korea. *Journal of the World Aquaculture Society*, 2010, 02 . 41 No S1 93-101 ISSN 0893-8849

53. Dias-Baruffi M, Stowell SR, Song SC, Arthur CM, Cho M, Rodrigues LC, Montes MA, Rossi MA, James JA, McEver RP, Cummings RD. Differential expression of immunomodulatory galectin-1 in peripheral leukocytes and adult tissues and its cytosolic organization in striated muscle. *Glycobiology*. 2010 20(5) 507-520 2010/05

54. Hee-Kyoung Lim, Somi K. Cho, Sanggyu Park, and Moonjae Cho Inhibitory Effects of an Ethanol Extract of *Artemisia capillaris* on Inflammatory Mediators from LPS-Stimulated RAW 264.7 Cells *J. Korean Soc. Appl. Biol. Chem.* 53(3), 275-282 (2010) 2010.06.

55. Hana Kim, Jeong Yong Moon, Hyun Ji Kim, Dong-Sun Lee, Moonjae Cho, Hyung-Kyoon Choi, Young Suk Kim, Ashik Mosaddik, Somi Kim Cho
Antioxidant and antiproliferative activities of mango (*Mangifera indica* L.) flesh and peel
Food Chemistry 121(2) 427-436 2010/07/15
56. Vivek K. Bajpai, Moon Jae Cho and Sun Chul Kang Control of Plant Pathogenic Bacteria of *Xanthomonas* spp. by the Essential Oil and Extracts of *Metasequoia lyptostroboides* Miki ex Hu In vitro and In vivo
J Phytopathol 158:479–486 (2010) 2010.08
57. Lee SA, Kim TY, Kwak TK, Kim H, Kim S, Lee HJ, Kim SH, Park KH, Kim HJ, Cho M, Lee JW. Transmembrane 4 L six family member 5 (TM4SF5) enhances migration and invasion of hepatocytes for effective metastasis.
J Cell Biochem. 2010 Sep 1;111(1):59-66. PubMed PMID: 20506553. 2010.09.01
58. Kim YM, Choe CG, Cho SK, Jung IH, Chang WY, Cho M. Three novel germline mutations in MLH1 and MSH2 in families with Lynch syndrome living on Jeju island, Korea. *BMB Rep.* 2010 Oct;43(10):693-7. PubMed PMID: 21034533.
59. M Adhya, K-S Choi, Y Yu and M Cho Expression and localization of MCsialec, a sialic acid-specific lectin in the marine bivalve Manila clam, *Ruditapes philippinarum* *Journal of Fish Diseases* 2010, 33, 889–899 2010.11
60. Park KI, Yang HS, Kang HS, Cho M, Park KJ, Choi KS. Isolation and identification of *Perkinsus olseni* from feces and marine sediment using immunological and molecular techniques. *J Invertebr Pathol.* 2010 Nov;105(3):261-9. Epub 2010 Aug 4. PubMed PMID: 20691188.
62. Jeong Yong Moon, Ashik Mosaddik, Hana Kim, Moonjae Cho, Hyung-Kyoon Choi, Young Suk Kim, Somi Kim Cho. The chloroform fraction of guava (*Psidium cattleianum* Sabine) leaf extract inhibits human gastric cancer cell proliferation via induction of apoptosis
Food Chemistry 125 (2011) 369–375 2011/03/15
63. Analysis of Expression pattern of the limonoid UDP-glucosyltransferase gene as an indicator for delayed bitterness from the Citrus species endemic in Jeju. *한국식품저장유통학회지* 2011, 18, 1-6

64. 오현주 · 강현식 · 강기수 · 김연우 · 홍정연 · 신경수 · 이진숙 · 이수현 · 이근화 · 조문제 · 서동인. 급성 로타바이러스 장염 소아에서 질환의 중증도와 로타바이러스 VP7 & VP4 유전형의 분포에 대한 연구 대한소아소화기영양학회지 : 제 14 권 제 2 호 2011 148~154
65. SY Park, H. K. Lim, SJ Lee, S. Kim Cho, S Park, and M. Cho Biological Effects of Various Solvent Fractions Derived from Jeju Island Red Sea Cucumber (*Stichopus japonicus*) J. Korean Soc. Appl. Biol. Chem. 54(5), 718-724 (2011)
66. Jin Young Kim, Jae Kook Nam, Sin-Ae Lee, Mi-Sook Lee, Somi K. Cho, Zee-Yong Park, Jung Weon Lee and Moonjae Cho. Proteasome Inhibition Causes Epithelial–Mesenchymal Transition upon TM4SF5 Expression. *Journal of Cellular Biochemistry* 112:782–792 (2011)
67. M Adhya, H-D Jeung, H-S. Kang, K. S. Choi, D. S. Lee, M Cho Cloning and localization of MCdef, a defensin from Manila clams (*Ruditapes philippinarum*). (2012) *Comp. Biochem. Physiol.B* 161(1) 25-31
68. SY Park, HK Lim, SM K. Cho and M Cho Pepsin-solubilised collagen (PSC) from Red Sea cucumber (*Stichopus japonicus*) regulates cell cycle and the fibronectin synthesis in HaCaT cell migration. (2012) *Food Chemistry*, 132 (5) 478-492
69. CH Yang BC Song and M Cho A Natural Mutation of the Hepatitis B Virus X Gene Affects Cell Cycle Progression and Apoptosis in Huh7 Cells (2012) *J. Korean Soc. Appl. Biol. Chem.* 55, 229 - 236
70. JY Kim, YM Kim, SM K. Cho, JW Lee and M Cho Functional regulation of Slug/Snail2 is dependent on GSK-3b-mediated phosphorylation (2012) *FEBS J.* 279, 2929–2939
71. YM Kim, J.S. Huh, KS Shin, and M Cho Development of a lentiviral vector and an efficient infection method for gene therapy for p22phox-defective CGD. (2012) *J. Korean Soc. Appl. Biol. Chem.* 55(5) 595-598
72. T T Mai, JY Moon, YW Song, PQ Viet , PV Phuc, JM Lee, T-H Yi, M Cho, Somi K. Cho. Ginsenoside F2 induces apoptosis accompanied by protective autophagy in breast cancer stem cells (2012) *Cancer Lett.* 321, 144–153
73. S-Y Park · H K Lim · S Park · M Cho Quality and Preference Changes Red Sea Cucumber (*Stichopus japonicus*) Kimchi during Storage Period (2012) *J Appl Biol Chem* 55(2), 135– 140

74. CH Yang, M Cho Hepatitis B virus X gene differentially modulates cell cycle progression and apoptotic protein expression in hepatocyte versus hepatoma cell lines (2013) *J. viral Hepatitis* 20 (1), 50-58
75. S Han, JH Lee, C Kim, D Nam¹, W-S Chung, S-G Lee, KS Ahn, Somi K. Cho, M Cho, and KS Ahn. Capillarisin inhibits iNOS, COX-2 expression, and proinflammatory cytokines in LPS-induced RAW 264.7 macrophages via the suppression of ERK, JNK, and NF-kappa B activation (2013) *IMMUNOPHARMACOLOGY AND IMMUNOTOXICOLOGY* 35(1), 34-42
76. Moonjae Cho • Kyung-Sue Shin. Chronic Granulomatous Disease on Jeju Island, Korea. (2013) *Journal of Genetic Medicine* 10(1), 1-6
77. Yeon Woo Song • Sanggyu Park • Somi K.Cho • Dongsoo Koh • Moonjae Cho. Synergistic Effect of the Novel Benzochalcone Derivative DK-78 and Doxorubicin on MCF7-VN Breast Cancer Stem Cells (2013) *J. Korean Soc. Appl. Biol. Chem* 56, 631-635
78. Jo-Heon Kim • Md.Morshedul Alam • Doek Bae Park • Moonjae Cho • Seung-Hong Lee • You-Jin Jeon • Dae-Yeul Yu • Tae Du Kim • Ha Young Kim • Chung Gu Cho • Dae Ho Lee. The effect of metformin treatment on CRBP-1 level and cancer development in the liver of HBx transgenic mice. (2013) *The Korean journal of physiology & pharmacology*, 17, 455-461
79. Manh Tin ho • Young Mee Kim • Dae-Yeul yu • Dae Ho Lee • Moonjae Cho • Changlim Hyun. TGF-b secreted from activated hepatic stellate cells may induce the transdifferentiation of hepatocytes into hepatocarcinoma in HBx-Expressing livers. (2014) *J Korean Soc Aplle Biol Chem* 57(4), 529-538
80. Manh Tin Ho • Hyun Sik Kang • Jung Sik Huh • Young Mee Kim • Youngho Lim • Moonjae Cho. Effects of the novel compound DK223 on migration and proliferation of human keratinocytes and primary dermal fibroblasts. (2014) *International Journal of Molecular sciences* 15, 13091-13110
81. Young Mee Kim • Moonjae Cho. Activation of NADPH oxidase subunit ncf4 induces ROS-mediated EMT signaling in HeLa cells. (2014) *Cellular signaling* 26, 784-796.
82. Ga Young Seo • Sanggye Park • Jung-Sik Huh • Moonjae Cho. The protective effect of glycitin on UV-induced skin photoageing in human primary dermal fibroblast. (2014) *J Korean Soc Apl Biol Chem* 57(4) 463-468

83. Moonjae Cho • Hyuk Yoon • Mijoo Park • Yound Hwa Kim • Yoongho Lim. Flavonoids promoting HaCaT migration: I. Hologram quantitative structure-activity relationships. (2014) *Phytomedicine* 21 560-569
84. Nhoc Thuy Bui • Manh Tin Ho • Young Mee Kim • Yoongho Lim • Moonjae Cho. Flavonoids promoting HaCaT migration : II. Molecular mechanism of 4',6,7-trimethoxyisoflavone via NOX2 activation. (2014) *Phytomedicine*. 21 570-577
85. Manh Tin Ho, Dongsoo Koh, Moonjae Cho. The mixture of Glycitin and TDB(3-(2,4,6-trimethoxyphenyl)-2,3-dihydro-1H-benzo[f]chromen-1-one) could ameliorate skin ageing by Anti-wrinkle and Anti-melanogenesis effects in dermal fibroblasts and melanocytes. (2014) *J Korean Soc Appl Biol Chem*.
86. Minjung Song, Dong Ki Park, Moonjae Cho, and Hye-Jin Park. Anti-inflammatory and Anti-allergic activities of Sea Cucumber (*Stichopus japonicus*) extract. (2013) *Food Sci. Biotechnol.* 22(6) 1661-1666
87. Young Mee Kim, Moonjae Cho. Soy isoflavone glycitin (4'-hydroxy-6-methoxyisoflavone-7-O-glucoside) promotes human dermal fibroblast cell proliferation and migration via TGF-beta signaling. (2015) *Phytotherapy research*. 29. 757-769
88. 빙소진, 호만틴, 소폴스, 조문제 등. Dietary supplementation of mushroom water suppresses fat accumulation in high fat diet induced-obese female mice and enhances immune cell development in non-obese mice. *Journal of the Korean society for applied biological chemistry*. 58(1) 75-79
89. Ga Young Seo, Manh Tin Ho, Ngoc Thuy Bui, Young Mee Kim, Dongsoo Koh, Yoongho Lim, Changlim Hyun, Moonjae Cho. Novel naphthochalcone derivative accelerates dermal wound healing through induction of epithelial-mesenchymal transition of keratinocyte. (2015) *Journal of biomedical science*. 22(47)
90. Thao Anh Tran, Manh Tin Ho, Yeon Woo Song, Moonjae Cho and Somi Kim Cho. Camphor induces proliferative and Anti-senescence activities in Human Primary Dermal Fibroblasts and inhibits UV-Induced Wrinkle Formation in Mouse Skin. (2015) *Phytotherapy Research* 29: 1917-1925.
91. Sanghoon Han, Ngoc Thuy Bui, Manh Tin Ho, Young Mee Kim, Moonjae Cho, Dong Bok

Shin. Dexamethasone inhibits TGF- β 1-induced cell migration by regulating the ERK and AKT Pathways in Human Colon Cancer cells via Cyr61. (2016) *Cancer Res Treat.* 48(3): 1141-1153

92. Phori Sophors, Young Mee Kim, Ga Young Seo, Jung Sik Huh, Yoongho Lim, Dong Soo Koh, Moonjae Cho. A synthetic isoflavone, DCMF, promotes human keratinocyte migration by activating Src/FAK signalling pathway. (2016). *Biochemical and Biophysical Research Communications* 472: 332-338

93. Ga Young Seo, Yoongho Lim, Dongsoo Koh, Jung Sik Huh, Changlim Hyun, Young mee Kim and Moonjae Cho. TMF and glycerin act synergistically on keratinocytes and fibroblasts to promote wound healing and anti-scarring activity. (2017) *Experimental & Molecular Medicine* 49: 302

94. Karthika Muthuramalingam, Jun Ho Kim, You Jin Jeon, Sum Rho, Young Mee Kim, Moonjae Cho. Effects of sea horse (*Hippocampus abdominalis*) - derived protein hydrolysate on skeletal muscle development. (2017) *J Appl Biol Chem* 60 (4): 373-381.

95. Seo GY, Hyun C, Koh D, Park S, Lim Y, Cho M. (2018) A novel synthetic material, BMM, accelerates wound repair by stimulating re-epithelialization and fibroblast activation. *Int J Mol Sci.* 19(4), 1164.

96. Eun-Jeong Kwon, Eun-Jung Park, Hyeran Yu, Jung-Sik Huh, Jinseok Kim & Moonjae Cho (2018) SIRT-1 regulates TGF- β -induced dermal fibroblast migration via modulation of Cyr61 expression, *Connective Tissue Research*, 59:3, 245-254, DOI: [10.1080/03008207.2017.1360293](https://doi.org/10.1080/03008207.2017.1360293)

97. Karthika Muthuramalingam, Sanggyu Park, Moonjae Cho (2018) Synthesis and optimization of immunomodulating hydrogel for biomedical application. *J Appl Biol Chem* 61(4), 351-355

98. Karthika Muthuramalingam, Seo-Young Kim, Youngmee Kim, Hyun-Soo Kim, You-Jin Jeon, Moonjae Cho (2019) Bigbelly seahorse (*Hippocampus abdominalis*)-derived peptides enhance skeletal muscle differentiation and endurance performance via activated P38MAPK/AKT signalling pathway: An *in vitro* and *in vivo* analysis. *Journal of Functional Foods* 52, 147–155

99. Muthuramalingam Karthika, Choi Seung In, Hyun Changlim, Kim Young Mee, Cho Moonjae (2019) β -Glucan-Based Wet Dressing for Cutaneous Wound Healing. *Advances in*

Wound Care. doi: 10.1089/wound.2018.0843

100. Gayoung Seo, Changlim Hyun, Seungin Choi, Youngmee Kim, Moonjae Cho (2019) The wound healing effect of four types of beta-glucan. *Applied Biological Chemistry* 62:20. <https://doi.org/10.1186/s13765-019-0428-2>

101. Karthika Muthuramalingam, Vineet Singh, Changmin Choi, Seung In Choi, Sanggyu Park, Young Mee Kim, Tatsuya Unno and Moonjae Cho (2019) "Effect of mushroom (*Schizophyllum* spp.) derived β -glucan on low-fiber diet induced gut dysbiosis" *Journal of Applied Biological Chemistry*. 62(2): 211-217

102. Karthika Muthuramalingam, Vineet Singh, Changmin Choi, Seung In Choi, Young Mee Kim, Tatsuya Unno, Moonjae Cho (2019) "Dietary intervention using (1,3)/(1,6)- β -glucan, a fungus-derived soluble prebiotic ameliorates high-fat diet-induced metabolic distress and alters beneficially the gut microbiota in mice model" *European journal of nutrition*. 2019/10/29, <https://doi.org/10.1007/s00394-019-02110-5>

103. Kim, J.E., Kim, H.-J., Jung, J.W., (...), Cho, M., Lee, J.W.(2019) TM4SF5-mediated CD44v8-10 splicing variant promotes survival of type II alveolar epithelial cells during idiopathic pulmonary fibrosis(2019) *CELL DEATH & DISEASE* 10(9),645

104. K Muthuramalingam Y Kim, M Cho, (2019) "Cellular senescence and EMT crosstalk in bleomycin-induced pathogenesis of pulmonary fibrosis—an in vitro analysis, *Cell biology international*, <https://doi.org/10.1002/cbin.11248>

105. Karthika Muthuramalingam, Youngmee Kim, Moonjae Cho,(2020)"Role of NADPH oxidase and its therapeutic intervention in TGF- β -mediated EMT progression: an in vitro analysis on HeLa cervical cancer cells, *Applied Biological Chemistry*, 63(1):1-8

106. Yu, H., Kim, Y.M., Cho, M. (2020) Cytoplasm-localized SIRT1 downregulation attenuates apoptosis and cell cycle arrest in cisplatin-resistant lung cancer A549 cells. *Journal of Cancer* 11(15), pp. 4495-4509

107. Kang, H.R., Moon, J.Y., Ediriweera, M.K., (...), Kasiviswanathan, D., Cho, S.K. (2020) Dietary flavonoid myricetin inhibits invasion and migration of radioresistant lung cancer cells (A549-IR) by suppressing MMP-2 and MMP-9 expressions through inhibition of the FAK-ERK signaling pathway. *Food Science and Nutrition* 8(4), pp. 2059-2067

108. Kim, Y.M., Muthuramalingam, K., Cho, M. (2020) Redox Regulation of NOX Isoforms on FAK(Y397)/SRC(Y416) Phosphorylation Driven Epithelial-to-Mesenchymal Transition in Malignant Cervical Epithelial Cells. *Cells* 9(6)

109. Muthuramalingam, K., Cho, M., Kim, Y.(2020) Role of NADPH oxidase and its therapeutic intervention in TGF- β -mediated EMT progression: an in vitro analysis on HeLa cervical cancer cells *Applied Biological Chemistry* 63(1),4

110, Choi, C., Jeong, W., Ghang, B., (...), Cho, M., Kim, J. (2020) Cyr61 synthesis is induced by interleukin-6 and promotes migration and invasion of fibroblast-like synoviocytes in rheumatoid arthritis *Arthritis Research and Therapy* 22(1),275

111. Singh, V., Muthuramalingam, K., Kim, Y.M., (...), Unno, T., Cho, M.(2021) Synbiotic supplementation with prebiotic *Schizophyllum commune* derived β -(1,3/1,6)-glucan and probiotic concoction benefits gut microbiota and its associated metabolic activities *Applied Biological Chemistry* 64(1),7

112. Vu, V., Muthuramalingam, K., Singh, V., (...), Unno, T., Cho, M.(2022) Effects of β -glucan, probiotics, and synbiotics on obesity-associated colitis and hepatic manifestations in C57BL/6J mice *European Journal of Nutrition* 61(2), pp. 793-807