

Curriculum Vitae

송은선

직위: 대학원생 (석사과정)

소속: 인천대학교 생명과학부 분자의생명전공

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학력

2024. 02. 16 인천대학교 생명과학과 이학석사

2022. 02. 18 인천대학교 분자의생명전공 이학사

경력

03/2022 – present

석사과정, 인천대학교 일반대학원 생명과학과 단백질공학실험실

03/2023 – 06/2023

Teaching experiment classes at Incheon University

03/2022 – 06/2022

Teaching experiment classes at Incheon University

12/2020 – 02/2022

학부연구생, 인천대학교 일반대학원 생명과학과 단백질공학실험실

수상

10/2022

Best Poster Award, 14th International Symposium on Natural Sciences

02/2022

생화학분자생물학회장상, 생화학분자생물학회

05/2021

DAEWOONG Best Research Award, International Conference 2021 (KSBMB)

연구실적 <논문, 제 1 저자>

1. Lee YJ*, **Song ES***, Lee YH, Lee KS, So B, Park JH, Yoon JH, Kim D, Kim M, Kwon HW, Byun Y[†], Lee KY[†], Park JT[†] (Jun 02, 2025) Dehydroacteoside rejuvenates senescence via TVP23C-CDRT4 regulation. (*: co-first author, [†]: co-corresponding author) **Experimental Gerontology** 207: 112800
2. **Song ES**, Lee YH, So MK, Kuk MU, Park J, Yoon JH, Lee YJ, Kim D, So B, Byun Y, Kwon HW[†], Park JT[†] (Mar 05, 2024) Establishment of a new promoter trapping vector using 2A peptide. ([†]: co-corresponding author) **Biotechnology and Bioprocess Engineering** 29(3):520–528
3. **Song ES**, So MK, Park HJ, Lee H, Lee YH, Kuk MU, Park J, Kwon HW, Choi J[†], Park JT[†] (Jul 03, 2023) Chemical screening identifies the anticancer properties of *Polyporous tuberaster*. ([†]: co-corresponding author) **Journal of Cancer** 14(11): 2075-2084

연구실적 <논문, 공동저자>

1. Lee YH, Kuk MU, So MK, Park HJ, **Song ES**, Park J, Yoon JH, Kwon HW[†], Choi J[†], Park JT[†] (Nov 14, 2023) Polyporus ulleungus mycelia cultured in MEB medium produce metabolites with anticancer property. ([†]: co-corresponding author) *Journal of Cancer* 10.7150/jca.89059
2. Lee YH*, Kuk MU*, So MK, **Song ES**, Lee H, Ahn S, Kwon HW[†], Park JT[†], Park SC[†] (Apr 15, 2023) Targeting Mitochondrial Oxidative Stress as a Strategy to Treat Aging and Age-Related Diseases. (*: co-first author, [†]: co-corresponding author) **Antioxidants** 12:934
3. Lee H, **Song ES**, Lee YH, Park JY, Kuk MU, Kwon HW, Roh H[†], Park JT[†] (Apr 02, 2023) A novel hybrid promoter capable of continuously producing proteins in high yield. ([†]: co-corresponding author) **Biochemical and Biophysical Research Communications** 650: 103-108
4. Kuk MU, Lee H, **Song ES**, Lee YH, Park JY, Jeong S, Kwon HW, Byun Y[†], Park SC[†], Park JT[†] (Mar 01, 2023) Functional restoration of lysosomes and mitochondria through modulation of AKT activity ameliorates senescence. ([†]: co-corresponding author) **Experimental Gerontology** 173:112091

5. Lee YH, Kim M, Park HJ, Park JY, **Song ES**, Lee H, Ko G, Ahn S, Kwon HW, Byun Y, Kim C[†], Choi J[†], Park JT[†] (Nov 28, 2022) Chemical screening identifies the anticancer properties of *Polyporous parvovarius*. (†: co-corresponding author) **Journal of Cancer** 14(1):50-60
6. Park JY, Lee H, **Song ES**, Lee YH, Kuk MU, Ko G, Byun YJ[†], Kwon HW[†], Park JT[†] (Dec 31, 2022) Improvement of Tol2 transposon system by modification of Tol2 transposase. (†: co-corresponding author) **Biotechnology and Bioprocess Engineering** 27(6): 987-994
7. Kuk MU*, Ga YJ*, Kim YJ, Park JY, **Song ES**, Lee H, Lee YH, Ko G, Kim JK, Yeh JY, Kwon HW[†], Byun YJ[†], Park JT[†] (Oct 24, 2022) Metabolic reprogramming as a novel therapeutic target for Coxsackievirus B3. (*: co-first author, †: co-corresponding author) **Animal Cells and Systems** 26(6) 275–28
8. Park JY, Lee H, **Song ES**, Lee YH, Kuk MU, Ko G, Kwon HW[†], Byun YJ[†], Park JT[†] (Oct 07, 2022) Restoration of lysosomal and mitochondrial function through p38 MAPK inhibition ameliorates senescence. (†: co-corresponding author) **Rejuvenation Research** 25(6):291-299
9. Lee YH, Park JY, **Song ES**, Lee H, Kuk MU, Joo JH, Roh H[†], Park JT[†] (2022) Improvement of Sleeping Beauty transposon system enabling efficient and stable protein production. (†: co-corresponding author) **Biotechnology and Bioprocess Engineering** 27(3): 353-360
10. Kuk MU, Park JY, **Song ES**, Lee H, Lee YH, Joo JH, Kwon HW[†], Park JT[†] (May 24, 2022) Bacterial artificial chromosome-based protein expression platform using the Tol2 transposon system. (†: co-corresponding author) **Biotechnology and Bioprocess Engineering** 27(3): 344-352
11. Lee YH, Choi D, Jang G, Park JY, **Song ES**, Lee H, Kuk MU, Joo JH, Ahn SK, Byun Y[†], Park JT[†] (Jan 30, 2022) Targeting regulation of ATP synthase 5 alpha/beta dimerization alleviates senescence. (†: co-corresponding author) **Aging** 14(2):678-707
12. Kuk MU, Lee YH, Kim JW, Hwang SY, Park JY, **Song ES**, Kwon HW[†], Oh S[†], Park JT[†] (Dec 31, 2021) Rapid and Efficient BAC Recombineering: Gain & Loss Screening System. (†: co-corresponding author) **Biotechnology and Bioprocess Engineering** 26(6): 1023-1033
13. Lee YH, Park JY, Lee H, **Song ES**, Kuk MU, Joo JH, Oh S, Kwon HW[†], Park JT[†], Park SC[†] (Nov 03, 2021) Targeting mitochondrial metabolism as a strategy to treat senescence (†: co-corresponding author) **Cells**. 10(11): 3003

연구실적 <특허, 등록>

1. 송은선, 최재혁, 임영운, 박준태 (Dec 30, 2025), 항암 활성을 가지는 폴리포르스 튜버라스터 균주 배양방법, 10-2907970 (등록)

연구실적 <특허, 출원>

1. 이유진, 송은선, 권형욱, 임현웅, 변영주, 박준태 (Jun 13, 2024), 피라졸 유도체를 유효성분으로 포함하는 항노화 조성물, 10-2024-0077014 (출원)
2. 이유진, 송은선, 권형욱, 변영주, 이기용, 박준태 (May 03, 2024), 디히드로악테오사이드를 유효성분으로 포함하는 항노화 조성물, 10-2024-0059125 (출원)
3. 송은선, 권형욱, 변영주, 박준태 (Aug 11, 2022), RMCE 랜딩패드, 10-2022-0100663 (출원)

연구실적 <Poster Presentation>

1. **Song ES**, Park JT (2023) Discovery of new endogenous promoters in CHO cells through promoter trapping, 15th International Symposium on Natural Sciences, October 30th ~ October 31th, 2023, Research Institute of Basic Sciences, Incheon National University
2. **Song ES**, Kang KY, Park JT (2023) Natural substances with anticancer activity discovered in fungal extracts, International Conference 2023, May 10 ~ May 13, 2023, 생화학분자생물학회
3. **Song ES**, Kang KY, Park JT (2023) Increased Protein Productivity Through the Use of the RMCE (Recombinase-Mediated Cassette Exchange) System and P2A, International Conference 2023, May 10 ~ May 13, 2023, 생화학분자생물학회

4. **Song ES**, Park JT (2022) Natural substances with anticancer properties discovered in *Polyporus tuberaster* mycelium extract, 14th International Symposium on Natural Sciences, October 6th ~ October 7th, 2022, Research Institute of Basic Sciences, Incheon National University
5. **Song ES**, Park JT (2022) Modification of recombinase-mediated cassette exchange (RMCE) system to increase protein productivity, 14th International Symposium on Natural Sciences, October 6th ~ October 7th, 2022, Research Institute of Basic Sciences, Incheon National University
6. **Song ES**, Park JT (2022) Increased Protein Productivity Through the Use of the RMCE (Recombinase-Mediated Cassette Exchange) System and P2A, 2022 년도 생화학분자생물학회 춘계 국제학술대회, MAY 23th~26th 2022, 생화학분자생물학회
7. **Song ES**, Park JT (2022) Natural substances with anticancer activity discovered in fungal extracts, 2022 년도 생화학분자생물학회 춘계 국제학술대회, MAY 23th~26th 2022, 생화학분자생물학회
8. **Song ES**, Park JT (2021) Applying the 2A system to the recombinase-mediated cassette exchange (RMCE) system to increase protein productivity, 2021 년도 한국분자세포생물학회 추계학술대회, NOV 03th~05th 2021, 한국분자세포생물학회
9. **Song ES**, Park JT (2021) Modification of recombinase-mediated cassette exchange (RMCE) system to increase protein productivity, 13th International Symposium on Natural Sciences, October 6th 2021, Research Institute of Basic Sciences, Incheon National University
10. **Song ES**, Park JT (2021) Modification of recombinase-mediated cassette exchange (RMCE) system to increase protein productivity, 2021 년도 생화학분자생물학회 춘계 국제학술대회, MAY 25th~27th 2021, 생화학분자생물학회

어학성적

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