

2022

(사)한국해양생명과학회

제8회 정기학술대회 및 정기총회

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|장소| 여수 유탑마리나 호텔 그랜드 볼룸

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(사)한국해양생명과학회



여수시



2022년 한국해양생명과학회 학술대회 및 정기총회 프로그램 일정

일 시		발 표 및 내 용		
10월 20일 (목)				
10:00 ~ 10:25	개회식 그랜드볼룸			
	▪ 개회사: 김정하 회장 (성균관대학교) ▪ 축 사: 박현식 여주시 부시장 박복재 부총장 (전남대학교) 김중현 소장 (국립수산과학원 남해연구소) ▪ 사진촬영			
10:25 ~ 11:40	[특별 세션 A] 그리니치홀 기후변화와 해양생명자원의 대응 (좌장: 이재성 교수, 인천대)		[특별 세션 B] 마린시티홀 수산 양식 및 식품산업 육성 (좌장: 김준환 교수, 선문대)	
	▪ 김태원 교수 (인하대학교) ▪ 박기태 박사 (극지연구소) ▪ 이충일 교수 (강릉원주대학교)		▪ 김민수 대표 (한국수산물기술연구원(주)) ▪ 김석렬 교수 (공주대학교) ▪ 김보성 교수 (군산대학교)	
11:40 ~ 12:00	질의 응답 및 토론		질의 응답 및 토론	
12:00 ~ 13:30	그랜드 볼룸	Luncheon Seminar (주MDkX) (좌장: 박현 교수, 고려대학교)		
13:30 ~ 14:10		기조 강연 1-Prof. Delin DUAN (Chinese Academy of Sciences) Selection and domestication influences on the cultivated <i>Saccharina japonica</i> (Laminariales, Phaeophyceae) in China		좌장: 손영창 교수 (강릉원주대)
14:10 ~ 14:50		기조 강연 2-김중현 소장(국립수산과학원 남해연구소) 우리나라의 수산 연구 개발 방향; 전복 양식을 중심으로		
14:50 ~ 15:00	Coffee Break			
15:00 ~ 16:00	학생 구두발표1 그리니치홀 (좌장: 최익영 교수, 강원대학교)		학생 구두발표2 마린시티홀 (좌장: 원은지 박사, 한양대학교)	
	▪ 홍석우 (성균관대학교) ▪ 김지은 (한양대학교) ▪ 김현진 (전남대학교) ▪ Lyu Huirong (군산대학교)		▪ 유제원 (상명대학교) ▪ Daniela Macias (성균관대학교) ▪ KASN SHANAKA (제주대학교) ▪ 신희상 (인천대학교)	
16:00 ~ 17:00	포스터 발표 A 오션베이홀		마린시티홀 연구 윤리 교육 (발표: 명정인 박사, 국립수산과학원)	
17:00 ~ 18:00	그랜드 볼룸	이사회		* 요트투어 (학생)
18:00 ~	B1 더웨이브	간담회		



포스터 목록

- P-01 Identification of thioredoxin domain-containing protein 12 of red spotted grouper, (*Epinephelus akaara*): insights into its molecular, transcriptional, functional properties and immune regulatory functions**
H.A.C.R. Hanchapola¹, D.S. Liyanage¹, W.K.M. Omeka¹, H.M.V. Udayantha¹, Chaehyeon Lim¹, Gaeun Kim¹, Jeongeun Kim¹, Jihun Lee¹, Y.K. Kodagoda¹, Sukkyoung Lee¹, Taehyug Jeong¹, Jehee Lee^{1*}
¹Department of Marine Life Sciences & Fish Vaccine Research Center, Jeju National University, Jeju Self-Governing Province 63243, Republic of Korea
- P-02 Active site point mutations regulate the functions of thioredoxin1(TRx1) in yellowtail clownfish (*Amphiprion clarkii*)**
H.M.V. Udayantha¹, Y.K. Kodagoda¹, H.A.C.R. Hanchapola¹, Sukkyoung Lee^{1,2}, Taehyug Jeong^{1,2}, Jehee Lee^{1,2*}
¹Department of Marine Life Sciences & Fish Vaccine Research Center & Marine Science, ²Institute, Jeju National University, Jeju 63243, Republic of Korea
- P-03 Insight into the expression analysis and bioinformatic characterization of C-C chemokine receptor type 2-like isoform x1 of *Epinephelus akaara***
K. P. Madushani¹, K. A. S. N. Shanaka¹, Jehee Lee^{1*}
¹Department of Marine Life Science & Fish Vaccine Research Center, Jeju National University, Jeju Self-Governing Province 63243, Republic of Korea, ²Nakdonggang National Institute of Biological Resources, Sangju, 37242, South Korea
- P-04 Suppressors of cytokine signaling 5b (Phsocsb) from *Planiliza haematocheilus* attenuate VHSV infection and enhance cell proliferation**
Wijerathna, H.M.S.M¹, Kishanthini Nadarajapillai¹, Shanaka, K.A.S.N¹, Kasthuriarachchi, T.D.W¹, Jehee Lee^{1,2*}
¹Department of Marine Life Science & Fish Vaccine Research Center, Jeju National University, Jeju Self-Governing Province 63243, Republic of Korea, ²Marine Science Institute, Jeju National University, Jeju Self-Governing Province 63333, Republic of Korea
- P-05 In silico analysis, Transcriptional profiling and Functional characterization of IKK epsilon from yellow tail clownfish (*Amphiprion clarkii*)**
W.K.M. Omeka¹, D.S. Liyanage¹, Y.K. Kodagoda¹, H.C.A.R. Hanchapola¹, Jehee Lee^{1*}
¹Department of Marine Life Sciences & Fish Vaccine Research Center, Jeju National University, Jeju Self-Governing Province 63243, Republic of Korea
- P-06 Cystatin C from *Amphiprion clarkii*, growth inhibition of *Escherichia coli* and expression level analysis upon immune challenge**
Sarithaa Sellathurai¹, Subothini Ganeshalingam¹, Kishanthini Nadarajapillai¹, Sumi Jung¹, Jehee Lee^{1*}
¹Department of Marine Life Sciences, Jeju National University Jeju Self-Governing Province 63243, Republic of Korea.

Suppressors of cytokine signaling 5b (Phsocsb) from *Planiliza haematocheilus* attenuate VHSV infection and enhance cell proliferation

Wijerathna, H.M.S.M¹, Kishanthini Nadarajapillai¹, Shanaka, K.A.S.N¹, Kasthuriarachchi, T.D.W¹,
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Introduction

The suppressors of cytokine signaling (SOCS) family proteins were identified as feedback inhibitors of cytokine signaling. SOCS family consist of SOCS1 to SOCS7. Even though, the immune functions of SOCS1 to 3 were well identified, the role of SOCS4 to 7 in innate immune system is unclear. The present study was conducted to investigate the role of SOCS5b found from redlip mullet fish (*Planiliza haematocheilus*)(Phsocs5b).

Results and Discussion

In vivo challenge with LPS, Poly I:C, and *Lactococcus gaeviewae* shows induced mRNA expression of Phsocs5b. Poly(I:C) shows highest mRNA induction. Interestingly, overexpression of Phsocs5b attenuated Viral hemorrhagic septicemia virus (VHSV) copy number and enhanced *IL-1β* and *IL-8* mRNA expression. Similarly, the low mRNA transcription level of viral G-, P-, N- and R-proteins further confirmed that Phsocs5b may hamper the VHSV infection. Moreover, previous study has revealed that mammalian SOCS5 degrade the epidermal growth factor receptor (EGFR) which is paramount in cell migration, differentiation, and influenza A virus entry into the cells. Similarly, our results show overexpression of Phsocs5b suppress the mRNA expression of *egfr* in FHM cells. However, scratch assay shows fast cell migration in Phsocs5b overexpressed FHM cells. Curiously, Phsocs5b overexpression enhance the mRNA expression of *pi3k* and *akt*, which are downstream molecules of Egfr signaling pathway. Taken together, we hypothesized that Egfr degradation may affect to reduced VHSV infection and at the same time, Phsocs5b may directly interact with a downstream molecule (Pi3k) of Egfr pathway to enhance the cell proliferation. Therefore, Phsocs5b will be a potential therapeutic target to enhance antiviral response of redlip mullet.

References

[1] L. Larsen, C. Ropke, Suppressors of cytokine signalling: SOCS. Review article, *APMIS*, 2002, 110, 833-844.

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