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博 士 学 位 论 文

**携带黑鲷 AS-prohepc2 及拟穴青蟹 Scy1
抗菌肽基因的减毒活菌载体系统作为
口服免疫途径的研究**

**Oral immunization studies relied on the live attenuated
bacteria *in vivo* expressing antimicrobial peptides
AS-prohepc2 and Scy1 in fish**

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