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Litopenaeus vannamei heat shock protein 70 (LvHSP70) enhances resistance to a strain of Vibrio parahaemolyticus, which can cause acute hepatopancreatic necrosis disease (AHPND), by activating shrimp immunity



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Litopenaeus vannamei heat shock protein 70 (LvHSP70) enhances resistance to a strain of Vibrio parahaemolyticus, which can cause acute hepatopancreatic necrosis disease (AHPND), by activating shrimp immunity

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Running title: LvHSP70 enhances shrimp immunity against Vibrio parahaemolyticus

**Keywords**: acute hepatopancreatic necrosis disease; heat shock protein 70; non-lethal heat shock; *Litopenaeus vannamei*; shrimp immunity; *Vibrio parahaemolyticus* 

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