

**Transformation of *Edwardsiella tarda* for the expression of
phiX174 E-lysis gene**

So Young Kim¹, Se Ryun Kwon², Ki Hong Kim², Sung Koo Kim¹
and Yoon Kwon Nam^{3,*}

*Departments of ¹Biotechnology and Bioengineering, ²Aquatic Life Medicine and
³Aquaculture, Pukyong National University, Busan 608-737, Korea*

To generate the bacterial ghost with *Edwardsiella tarda*, one of important pathogenic bacteria causing the severe disease symptom in many cultured fish species, optimized transformation condition was established based on chemical and/or electrical transformation strategies. Transformation efficiency, stringency of plasmid copies and stability of transformants were examined with various plasmid constructs harboring different replication origins. Expression profiles of phiX174 E-lysis gene driven by lambda PR promoter was compared between *E. tarda* and *E. coli* ghosts based on the optical density monitoring, RNA blot hybridization and RT-PCR analysis.

*Corresponding author: yoonknam@pknu.ac.kr