

## Appendix 9.

### Experimental verification of putative strong promoters identified in *Thermotoga maritima* genome

In the protocol implemented, the promoters were fused to the *Bacillus stearothermophilus argC* reporter-gene, which codes for N-acetyl glutamylphosphate reductase. Then, ArgC synthesis was performed in the coupled *E. coli* transcription-translation system. The Ptac promoter was used as a reference to compare protein yields. It is a strong hybrid promoter consisting of the -35 region of the *trp* promoter and the -10 region of the *lacUV5* promoter/operator (de Boer *et al.*, 1983). In all assays, the optimal Shine-Dalgarno sequence GGAGG was associated to the promoter.

## References

de Boer, H.A., Comstock, L.J. and Vasser, M. (1983) The tac promoter: a functional hybrid derived from the *trp* and *lac* promoters. *Proc. Natl. Acad. Sci. USA.*, **80**, 21-25.