



**Figure S1. Structure of t<sup>6</sup>A37 in the anticodon stem loop (ASL) of tRNA<sup>Lys</sup>(UUU).** As observed in complex with AAA-mRNA bound in the A-site of the decoding center of *Thermus thermophilus* 30S ribosome (PDB 1XMO) [1]. Inset: closeup of the modification-dependent ASL of tRNA<sup>Lys</sup>(UUU) (C atoms in cyan) in complex with AAA-mRNA (carbon atoms in violet), with the positions of t<sup>6</sup>A37 and A1 from the mRNA codon labeled.

1. Murphy FVt, Ramakrishnan V, Malkiewicz A, Agris PF (2004) The role of modifications in codon discrimination by tRNA(Lys)UUU. *Nat Struct Mol Biol* 11: 1186-1191.

**Supplementary Information:** The Crystal Structure and Small-Angle X-Ray Analysis of CsdL/TcdA reveal a new tRNA binding motif in the MoeB/E1 superfamily. M. López-Esteva, A. Ardá, M. Savko, A. Round, W.E. Shepard, M. Bruix, M. Coll, F.J. Fernández, J. Jiménez-Barbero, M.C. Vega. *PLoS ONE*, 2015.