16S rRNA Purification using Ribosomal Protein S15 from *E. coli*

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For investigation of interaction between 16S rRNA and several RNA binding proteins, the synthesized 16S rRNA has usually used. On the other hands, it has used partial separation method of 16S rRNAs from total RNAs using capture probe covalently linked to magnetic beads. It might mean that there is no method to purify inherent 16S rRNA specifically. In the present work, we suggested a particular 16S rRNA purification method using a ribosomal protein, S15 of *E. coli*. S15 is one of proteins consitituting ribosome small subunit (30S) and binds to 16S rRNA. We overexpressed S15s in *E. coli* and they were binding to 16S rRNA in the cell. After cell lysis, S15s bound to 16S rRNA were purified by his-tag Ni-NTA resin. And then, we could obtain innate 16S rRNA through the S15 removal step. This method would be helpful to research about 16S rRNA characterization.