

**Materials List for:**

# ***In vitro* tRNA Methylation Assay with the *Entamoeba histolytica* DNA and tRNA Methyltransferase Dnmt2 (Ehmeth) Enzyme**

Ayala Tovy<sup>1</sup>, Benjamin Hofmann<sup>2</sup>, Mark Helm<sup>2</sup>, Serge Ankri<sup>1</sup>

<sup>1</sup>Faculty of Medicine, Rappaport Institute, Technion - Israel Institute of Technology

<sup>2</sup>The Pharmacy and Biochemistry Institute, Johannes Gutenberg University

Correspondence to: Serge Ankri at [sankri@tx.technion.ac.il](mailto:sankri@tx.technion.ac.il)

URL: <https://www.jove.com/video/2390>

DOI: [doi:10.3791/2390](https://doi.org/10.3791/2390)

## Materials

| Name                                          | Company                | Catalog Number    | Comments |
|-----------------------------------------------|------------------------|-------------------|----------|
| Taq Polymerase (5 U/μl)                       | Rapidozym, Berlin      | GEN-003-1000      |          |
| 10X Gentherm PCR Buffer                       | Rapidozym, Berlin      | With GEN-003-1000 |          |
| MgCl <sub>2</sub> (50 mM)                     | Rapidozym, Berlin      | With GEN-003-1000 |          |
| dNTP mix (10 mM)                              | Fermentas              | R0191             |          |
| Oligo nucleotides                             | IBA, Göttingen         | Customized        |          |
| NTP mix (25mM)                                | Fermentas              | R0481             |          |
| GelRed Nucleic Acid Stain 3X in water         | Biotium, Inc.          | 41001             |          |
| Dithiothreitol                                | Fermentas              | R0861             |          |
| Spermidine                                    | Sigma-Aldrich          | S0266             |          |
| Pall Nanosep 0.45 μm                          | Sigma-Aldrich          | Z722014           |          |
| Dichlorodimethylsilane                        | Sigma-Aldrich          | 40140             |          |
| Ethanol (Ph. Eur.)                            | Carl Roth GmbH         | 5054.3            |          |
| Tris HCl                                      | Carl Roth GmbH         | 9090.3            |          |
| Tris                                          | Carl Roth GmbH         | AE15.1            |          |
| BSA                                           | Fermentas              | B14               |          |
| Triton X-100                                  | Sigma-Aldrich          | T8787             |          |
| TEMED                                         | Carl Roth GmbH         | 2367.1            |          |
| Ammonium Peroxodisulfate                      | Carl Roth GmbH         | 9592.2            |          |
| Rotiphorese Sequencing gel concentrate        | Carl Roth GmbH         | 3043.1            |          |
| Rotiphorese Sequencing gel diluent            | Carl Roth GmbH         | 3047.1            |          |
| Rotiphorese Sequencing gel buffer concentrate | Carl Roth GmbH         | 3050.1            |          |
| Rotiphorese 10X TBE-buffer                    | Carl Roth GmbH         | 3061.2            |          |
| DEPC                                          | Sigma-Aldrich          | D5758             |          |
| RNAse ExTERMINATOR                            | Biological Industries  | 01-895-1B         |          |
| Ampicillin                                    | Sigma-Aldrich          | A0166             |          |
| IPTG                                          | Sigma-Aldrich          | I6758             |          |
| PMSF                                          | Sigma-Aldrich          | P7626             |          |
| Lysozyme                                      | Sigma-Aldrich          | L7651             |          |
| Leupeptine                                    | Sigma-Aldrich          | L2884             |          |
| Benzonase Nuclease                            | Novagen, EMD Millipore | 70746-3           |          |

|                                      |                        |             |  |
|--------------------------------------|------------------------|-------------|--|
| BugBuster protein extraction reagent | Novagen, EMD Millipore | 70921-3     |  |
| Glutathione-agarose resin            | Sigma-Aldrich          | G4510       |  |
| L-glutathione reduced                | Sigma-Aldrich          | G4251       |  |
| AdoMet                               | New England Biolabs    | B9003       |  |
| AdoMet <sup>3</sup> H                | PerkinElmer, Inc.      | NET155250UC |  |
| Scintillation Cocktail               | CytoScint              | 882453      |  |