

Materials List for:

# Cell Based Assays of SINEUP Non-coding RNAs That Can Specifically Enhance mRNA Translation

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## Materials

| Name                                                      | Company                                                   | Catalog Number                                                                                                                                                                                                                | Comments                                                                                                                   |
|-----------------------------------------------------------|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Synthetic SINEUP                                          | Cell Guidance Systems Ltd. in UK and K.K.DNAFORM in Japan | <a href="https://www.cellgs.com/items/sineupand8482.html">https://www.cellgs.com/items/sineupand8482.html</a> and <a href="https://www.dnaform.jp/en/information/20130320">https://www.dnaform.jp/en/information/20130320</a> | Step 1.5.                                                                                                                  |
| HEK293T/17                                                | ATCC                                                      | ATCC CRL-11268                                                                                                                                                                                                                | Step 2.1.                                                                                                                  |
| Falcon Multiwell Plate For Cell Culture 6 well plate      | Corning                                                   | 6902A01                                                                                                                                                                                                                       | Step 2.1.                                                                                                                  |
| Corning BioCoat Poly-D-Lysine 24 well Plate               | Corning                                                   | 08-774-124                                                                                                                                                                                                                    | Step 2.1.                                                                                                                  |
| Lipofectamine 2000 Transfection Reagent                   | Thermo Fisher Scientific                                  | 11668027                                                                                                                                                                                                                      | Step 2.2.                                                                                                                  |
| pEGFP-C2                                                  | Clontech                                                  | #6083-1                                                                                                                                                                                                                       | Step 2.2.                                                                                                                  |
| Cell Lysis Buffer (10x)                                   | Cell Signaling Technology                                 | #9803S                                                                                                                                                                                                                        | Step 3.1. This is pre-mixed cell lysis solution.                                                                           |
| PMSF                                                      | Cell Signaling Technology                                 | #8553S                                                                                                                                                                                                                        | Step 3.1. To complete cell lysis buffer, add 0.005% (w/v) PMSF to 1 x cell lysis buffer.                                   |
| DC protein assay kit II                                   | BIO RAD                                                   | #5000112JA                                                                                                                                                                                                                    | Step 3.3.                                                                                                                  |
| 10% Mini-PROTEAN TGX Precast Protein Gels, 12-well, 20 µl | BIO RAD                                                   | #4561035                                                                                                                                                                                                                      | Step 4.2.                                                                                                                  |
| Amersham Protran Premium NC 0.45 (150 mm×4 m)             | Amersham                                                  | 10600013                                                                                                                                                                                                                      | Step 4.3., This is a 0.45 µm nitrocellulose membrane.                                                                      |
| Nonfat Dry Milk                                           | Cell Signaling Technology                                 | #9999S                                                                                                                                                                                                                        | Step 4.4. A component of the blocking solution.                                                                            |
| GFP Tag Antibody                                          | Thermo Fisher Scientific                                  | A-6455                                                                                                                                                                                                                        | Step 4.5. Lot number: 1495850, RRID: AB_221570                                                                             |
| Monoclonal Anti-β-Actin antibody produced in mouse        | SIGMA                                                     | A5441                                                                                                                                                                                                                         | Step 4.5. Lot number: 026M4780V, RRID: AB_476744                                                                           |
| Polyclonal Goat Anti Rabbit Immunoglobulins               | Dako                                                      | P0448                                                                                                                                                                                                                         | Step 4.5. This is secondary antibody conjugating with HRP for anti GFP antibody. Lot number: 20017525, RRID:AB_2617138     |
| Polyclonal Goat Anti mouse Immunoglobulins                | Dako                                                      | P0447                                                                                                                                                                                                                         | Step 4.5. This is secondary antibody conjugating with HRP for anti β-Actin antibody. Lot number: 20019698, RRID:AB_2617137 |
| ECL Western Blotting Detection Reagents                   | Amersham                                                  | RPN2109                                                                                                                                                                                                                       | Step 4.9.                                                                                                                  |

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|----------------------------------------------------|--------------------------|------------|----------------------------------------------------------------------------------|
| Maxwell Rapid Sample Concentrator (RSC) Instrument | Promega                  | AS4500     | Step 5.1. This is commercially available RNA extraction instrument.              |
| Maxwell RSC simplyRNA Cells Kit                    | Promega                  | AS1390     | Step 5.1. This is commercially available RNA extraction kit.                     |
| TURBO DNA-free Kit                                 | ambion                   | AM1907     | Step 5.2 and 5.4. The kit contains DNase, DNase buffer and inactivation reagent. |
| PrimeScrip 1st strand cDNA Synthesis Kit           | TaKaRa                   | 6110A      | Step 6.1. The kit contains reagents of first strand cDNA synthesis.              |
| TB Green Premix Ex Taq II                          | TaKaRa                   | RR820A     | Step 6.2.                                                                        |
| Hoechst3342                                        | Thermo Fisher Scientific | H3570      | Step 7.2.                                                                        |
| Celigo S                                           | Nexcelom Bioscience      | 200-BFFL-S | Step 7.3. This is a high throughput micro-well image cytometer.                  |