

## Recombinant Mouse Mettl1 Protein, Myc/DDK-tagged

**Cat. No.** Mettl1-4040M    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Purified recombinant protein of mouse full-length methyltransferase like 1 (Mettl1), with C-terminal MYC/DDK tag, expressed in HEK293T cells.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Species</b>          | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Source</b>           | HEK293                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Description</b>      | Methyltransferase that mediates the formation of N7-methylguanine in a subset of RNA species, such as tRNAs, mRNAs and microRNAs (miRNAs). Catalyzes the formation of N7-methylguanine at position 46 (m7G46) in tRNA. Also acts as a methyltransferase for a subset of internal N7-methylguanine in mRNAs. Internal N7-methylguanine methylation of mRNAs regulates translation. Also methylates a specific subset of miRNAs, such as let-7. N7-methylguanine methylation of let-7 miRNA promotes let-7 miRNA processing by disrupting an inhibitory secondary structure within the primary miRNA transcript (pri-miRNA). Acts as a regulator of embryonic stem cell self-renewal and differentiation. |
| <b>Molecular Mass</b>   | 30.6 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Purity</b>           | > 80% as determined by SDS-PAGE and Coomassie blue staining                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Stability</b>        | Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Storage</b>          | Store at -80 centigrade after receiving vials.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

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**Concentration** >50 µg/mL as determined by microplate BCA method

**Storage Buffer** 25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10% glycerol.

## GENE INFORMATION

**Gene Name** [Mettl1 methyltransferase like 1 \[ Mus musculus \(house mouse\) \]](#)

**Official Symbol** [Mettl1](#)

**Synonyms** METTL1; methyltransferase like 1; tRNA (guanine-N(7)-)-methyltransferase; methyltransferase-like 1; tRNA(m7G46)-methyltransferase; methyltransferase-like protein 1; tRNA (guanine(46)-N(7))-methyltransferase; 2810012D02Rik

**Gene ID** [17299](#)

**mRNA Refseq** [NM\\_010792](#)

**Protein Refseq** [NP\\_034922](#)

**UniProt ID** [Q9Z120](#)

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