

TABLE S8. Summary of the sensitivity of various restriction endonucleases to DNA modifications introduced by the JCM7686_1231, JCM7686_2255 and JCM7686_2934 proteins (m⁶A MTases).

| REase | Recognition site | Sensitivity to m ⁶ A | Number of sites in pET28_JCM7686_2934 | Number of sites in pET28_JCM7686_2255 | Number of sites in pET28_JCM7686_1231 | Cleavage |
|--------|------------------|---------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|----------|
| Hinfl | GANTC | S | 19 | 19 | 18 | N |
| AluI | AGCT | S | 25 | 25 | 22 | Y |
| CseI | GACGC | S | 14 | 14 | 13 | Y |
| NlaIII | CATG | U | 32 | 32 | 30 | Y |
| TaiI | ACGT | S | 14 | 14 | 14 | Y |
| TasI | AATT | U | 23 | 23 | 21 | Y |
| Tru1I | TTAA | U | 25 | 25 | 25 | Y |

Y – complete cleavage; N – no digestion; S – sensitive to m⁶A; U – unknown sensitivity to m⁶A; **A** – the enzyme will not cleave if the **marked** adenine is methylated; A – there are no data on the sensitivity of the enzyme to methylation of the unmarked adenine.