Lamichhane et al., Supplemental material

Supplemental Figure S1. The RNA modified *in vitro* by TRIT1, but not *in vivo*, is not tRNACys, tRNALeu or mt-tRNAs. As specified in the figure, the complementary DNA oligo of these selected tRNAs was added for elimination by RNase H. RNA was purified after RNase H digestion and split into two parts for further analysis: A) *in vitro* modification with ¹⁴C-DMAPP and His-TRIT1, and B) confirmation that elimination worked for mt-tRNACys.

Supplemental Figure S2: Overexpression of TRIT1 does not increase the i6A37 content of tRNA[Ser]Sec. Left: PHA6 assay. Right: Immunoblot; lanes 1 & 3 show independent control cell extracts, lanes 2 & 4 show independent TRIT1 over expression. Detection was with anti-TRIT1 Ab.



¹⁴C DMAPP in vitro modification



Supplemental Figure S2, Lamichhane et al.

Measurement of i6A modification level of tRNASec in TRIT1 overexpressed sample.

Result shows that i6A modification level of tRNASec is not increased in wild-type cells in response to TRIT1 over-expression



0.678 (Standard error is calculated using 1X and 2X samples)

0.65

0.028

1215.3

1792.3