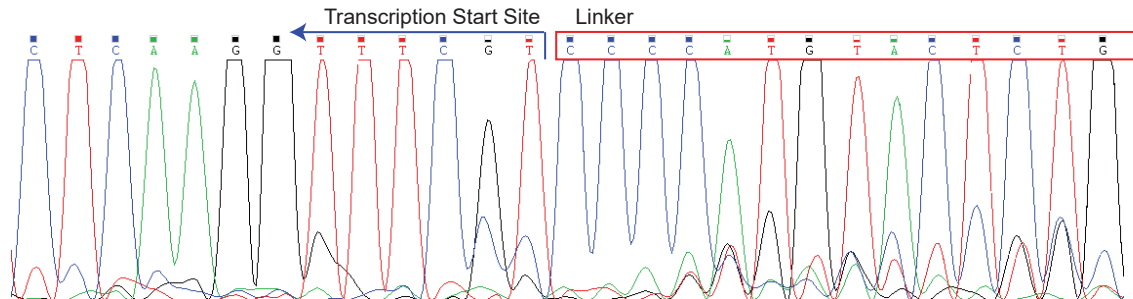
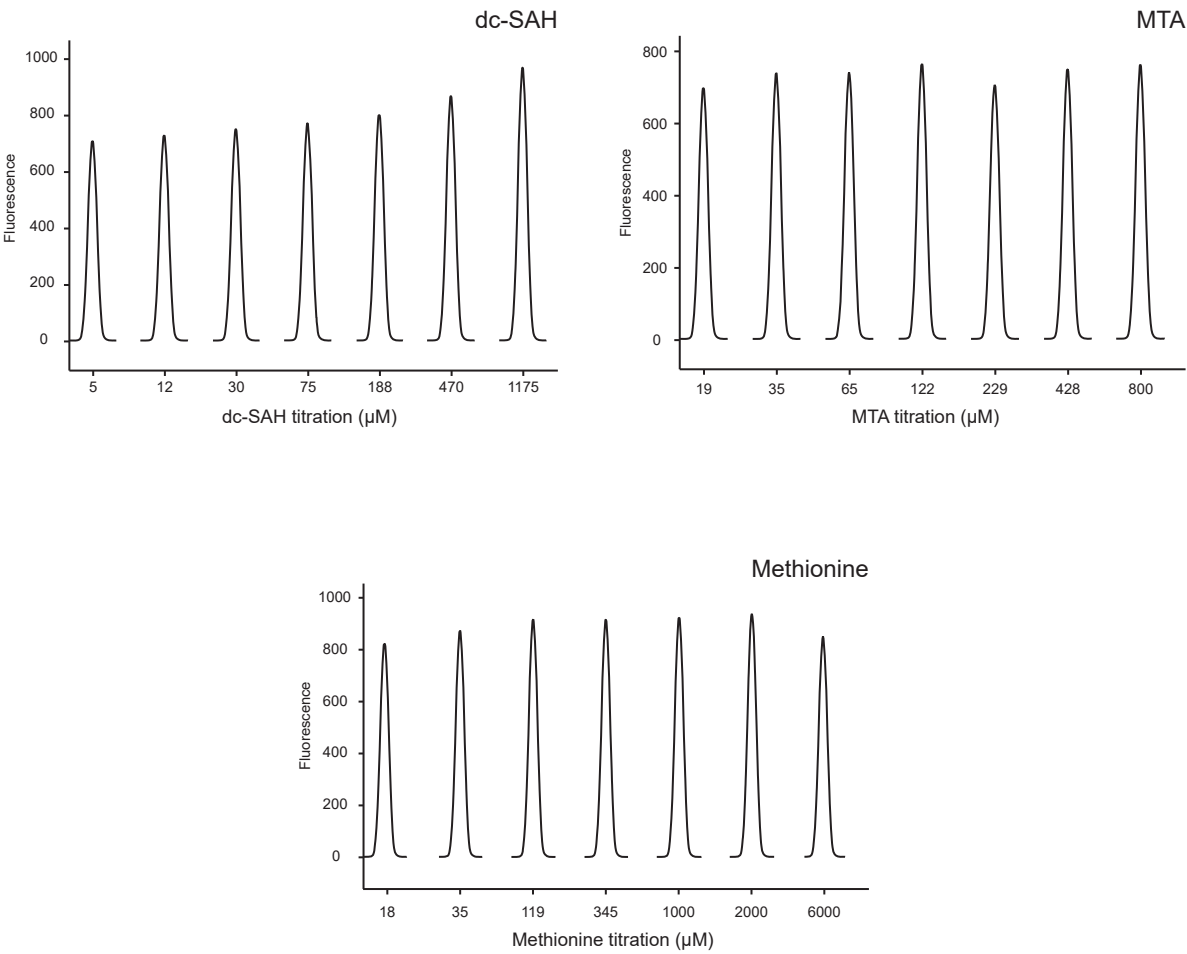


Supplemental Figure S1



Supplemental Figure S1 5' RACE of UTR RNA of *sam1* used for analysis.

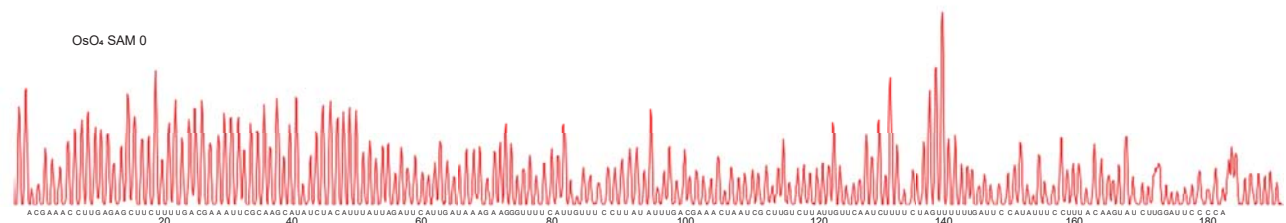
Supplemental Figure S2



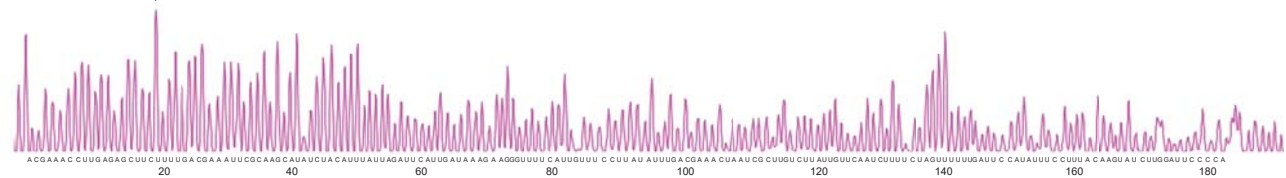
Supplemental Figure S2 The fluorescence intensity of *sam1* UTR RNA with different SAM analogues are detected in the capillary scan using Monolith NT.115 system (NanoTemper Technologies).

Supplemental Figure S3

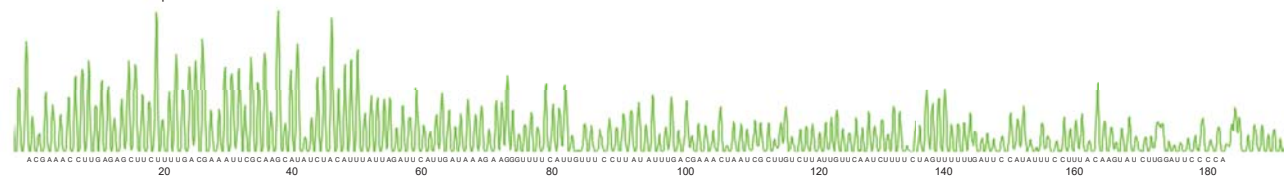
OsO₄ SAM 0



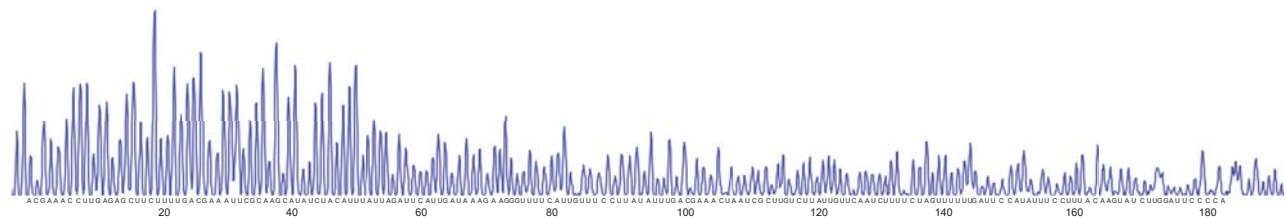
OsO₄ SAM 50μM



OsO₄ SAM 200μM

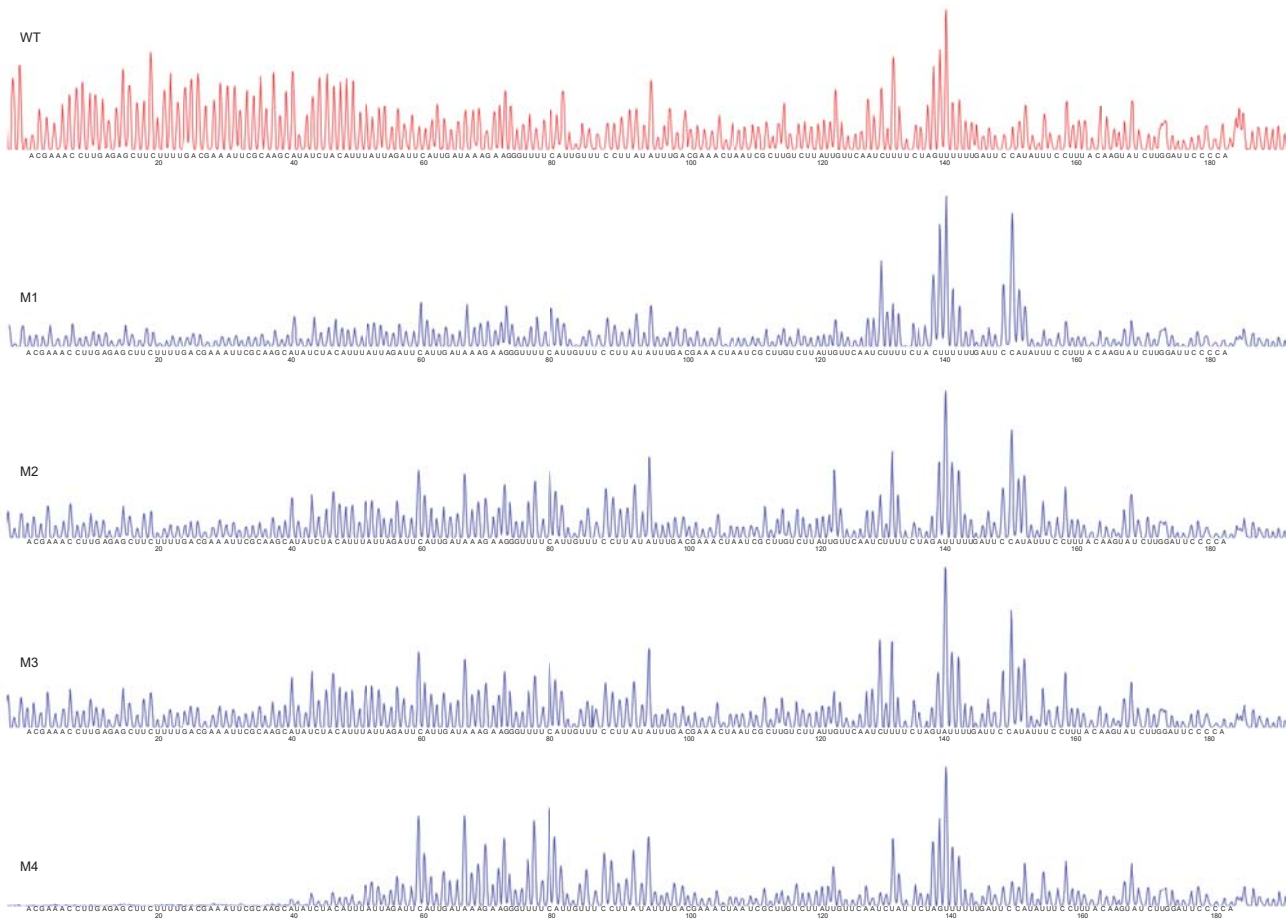


OsO₄ SAM 400μM



Supplemental Figure S3 Electropherogram of OsO₄-modification on full-length *sam1* UTR RNA on SAM titration.

Supplemental Figure S4



Supplemental Figure S4 Electropherogram of OsO₄-modification on full-length *sam1* UTR and Mutation 1-4 RNA.