Targeted covalent labeling of small RNAs and ssRNAs

BRIEF DESCRIPTION OF A TECHNOLOGY

Chemo-enzymatic covalent deposition of functional and reporter groups at 3’-terminal nucleotides in small RNAs such as miRNAs, siRNAs or long ssRNAs using HEN1 RNA 2’-O-methyltransferases from plants or animals, respectively. Enables a highly selective analysis of transcriptomes and discovery of new microRNA species in animal and human samples.

PURPOSE

Targeted covalent labeling of small RNAs or ssRNAs for imaging, enrichment and sequence analysis.

FIELDS OF APPLICATION

Biomedicine, biomarkers and diagnostics, miRNA profiling, transcriptome profiling, single-molecule genomics, biomaterials.

TECHNOLOGY READINESS LEVEL

Technology validated in lab.

INTELLECTUAL PROPERTY


PUBLICATIONS