PRODUCT INFORMATION

RFP Self-Amplifying RNA / RFP saRNA

v. 260201

Catalog number	CR00032-100UG / CR00032-1MG
Package	100 µg / 1 mg
Description	RFP Self-Amplifying RNA expresses red fluorescent protein in cells, emitting light at approximately 583 nm. It's used for visualizing cellular processes, gene expression analysis, protein localization, and multiplex imaging with other markers. As a self-amplifying RNA, it provides enhanced and prolonged protein expression with lower doses compared to traditional mRNA, making it highly efficient for applications like live cell tracking and gene editing research, where extended observation periods are beneficial. This transient system is ideal for experiments requiring temporary but robust protein expression. Croyez's RFP saRNA was generated through in vitro transcription, and these mRNAs are then fortified at their 5' end by modified nucleotide capping, known as Cap1. To mimic the characteristics of fully processed mature mRNAs, we incorporate a poly(A) tail at the 3' end and optimize the mRNAs to enhance stability and overall performance. This ensures that the mRNAs function similarly to naturally occurring mature mRNAs in cells.
mRNA length	8437 nt
Base Composition	Unmodified bases
Concentration	1.0 mg/ mL
Cap Modification	Cap 1 structure
Poly A tail	Yes
Form	Liquid
Buffer	1 mM sodium citrate buffer, pH 6.4.
Storage	Products can be stored at -80°C or below. We recommend to aliquot the mRNA solution for a better storage. Avoid repeated freeze/thaw cycles.
Shipping	The products are shipped on dry ice and should be avoided for freeze-thaw cycles.
Application	Reporter Genes

For Research Use Only. Not for use in diagnostic or therapeutic procedures.